

Housing for an Emerging Middle Class

Rethinking the Development of Military Bases in Metro Manila

by
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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

A shortage of affordable housing in Metro Manila, Philippines, has become an issue for those who work in the Business Process Outsourcing (BPO) industry. While this housing shortage has existed since World War 2, the Philippine Government has prioritized the creation of jobs as a way to lift people out of poverty. Since the 1990s the Philippine economy has transformed through two major acts. The first is through the sale of raw lands from military bases to real estate developers, resulting in the creation of new Central Business Districts or “Global Cities” around Metro Manila. The second is through the designation of Special Economic Zones (SEZs) within global cities, that has allowed the BPO industry to boom. Side by side, the rise of the Global City, and the emergence of a middle class of BPO workers, has created an image of the prosperity for the Philippines. Global Cities, however, are not successful in integrating the housing needs of BPO workers. Instead they cater to foreign investors, multinational corporations, and wealthy individuals.

As the BPO Industry continues to grow, the demand for affordable housing within the city centre will increase. This thesis proposes a masterplan and housing strategy that caters to the changing needs of this young and emerging demographic. Forecasting the eventual decommissioning of Camp Aguinaldo, which is currently the headquarters of the Armed Forces of the Philippines, this thesis rethinks the development strategies of military bases in Metro Manila.

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Part 1

1.0

Introduction

1.1

Intramuros / Extramuros – Spatial Divisions as a Framework for Urban Inequality

1.2

From Military Bases to Global Cities

1.3

BPOs and SEZs

1.4

Where do BPO workers live?



Figure 1.1: Extramuros neighbourhood of Guadalupe Nuevo in the city of Makati

1.0 - Introduction

This thesis examines the socio-economic conditions and real estate development practices that have shaped the urban growth of Metro Manila which have created a shortage of affordable housing within the city centre. In the *Language of Cities*, Daniel Sudjic argues that “for a city, practice can be more significant than theory”, when narrating the history and development of various urban mega projects such as Canary Wharf in London and La Defense in Paris.¹ Similar development practices can be observed in Metro Manila, from the building of the walled city of Intramuros, to the country’s newest central business district Bonifacio Global City — both of which are special enclaves that adhere to globalised urban planning principles from different time periods. This thesis attempts to question current real estate development practices, in order to address the gap in affordable housing in Metro Manila.

Today, a large part of the city’s real estate and commercial growth is driven by the boom of the Business Process Outsourcing (BPO) industry — a method of subcontracting various business-related operations to countries where the cost of labour is cheap. The industry’s growth has created an middle class, as well as the challenge of new urban housing needs in Metro Manila. As of 2010, the IT-BPO industry has been a significant contributor to the Philippine economy generating export revenues as high as \$8.9 billion USD, equivalent to 4.8% of the Philippine’s GDP.² BPO firms operate within special economic zones located within

1 Deyan Sudjic, *The Language of Cities* (United Kingdom: Penguin Books, 2017).

2 Clark Bautista, “IT-BPO Industry’s Direct & Indirect Economic Impact: The Outsourcing Multiplier Applied to the Philippines and Indian Economies,” *Tholons Whitepaper* (2011).

premier central business districts or global cities throughout Metro Manila. Although the industry employs almost 1.16 million people who earn at least double the minimum wage, finding affordable housing close to work has proven difficult for newly employed BPO Workers.³ Many may choose to live in dormitories located on the peripheries of CBDs, or they may choose to live in the suburbs, spending almost 2-4 hours a day commuting, due to inefficient transportation infrastructure within the city.

Furthermore, global cities and other central business districts in Metro Manila are located within or adjacent to former military bases — a pattern of urban growth evident since Spanish and American colonisation. The sale of parcels land within military bases has allowed the government to generate funds for the Armed Forces of the Philippines (AFP), as well as convert valuable raw lands into higher economic uses. The Bases Conversion Development Authority has identified key sites throughout the country for future mixed-use commercial developments, similar to Bonifacio Global City — located in the former Fort Bonifacio. However, within Metro Manila, sites such as Camp Aguinaldo, the current headquarters of the AFP, have not yet officially been identified as a site for any future development. Despite this, multiple presidents since the 1990s have expressed interest in selling parcels of land within the camp. Due to Camp Aguinaldo's proximity to other central business districts in Metro Manila, there is prime opportunity to create a site for affordable housing within the city centre.

As Saskia Sassen writes in *Globalization and Its Discontents*, “global cities are the sites of the over-valorization of corporate capital and the further devalorization of disadvantaged economic

³ Julius Guevara, Determining the Housing Demands of BPO Workers (Manila, Philippines: Colliers International Philippines,[2016]).

actors, both firms and workers.”⁴ This is true in Metro Manila, since global cities are sites where multinational corporations choose to locate their headquarters, often receiving favourable tax incentives under the *Special Economic Zone Act of 1995*. In addition to generating more commercial office space, real estate developers prefer to build high-end luxury condominiums within global cities, catering to wealthy individuals as opposed to BPO workers. Therefore, the creation of these special and exclusive enclaves further exacerbates the need for affordable housing, further disadvantaging BPO workers since they are priced out of the real estate market.

Each part of this thesis studies how different economic or political forces have shaped the urban growth of Metro Manila. Part 1 studies the practices of real estate development in Metro Manila, how political and economic factors have shaped the urban fabric, and the BPO industry and its workers. Part 2 addresses the need for affordable housing through the design of masterplan and housing building, on a 5.3-hectare parcel of land within Camp Aguinaldo.

⁴ Saskia Sassen, *Globalization and its Discontents* (New York: The New Press, 1998).

Figure 1.4: The entrance to the walled city of Intramuros

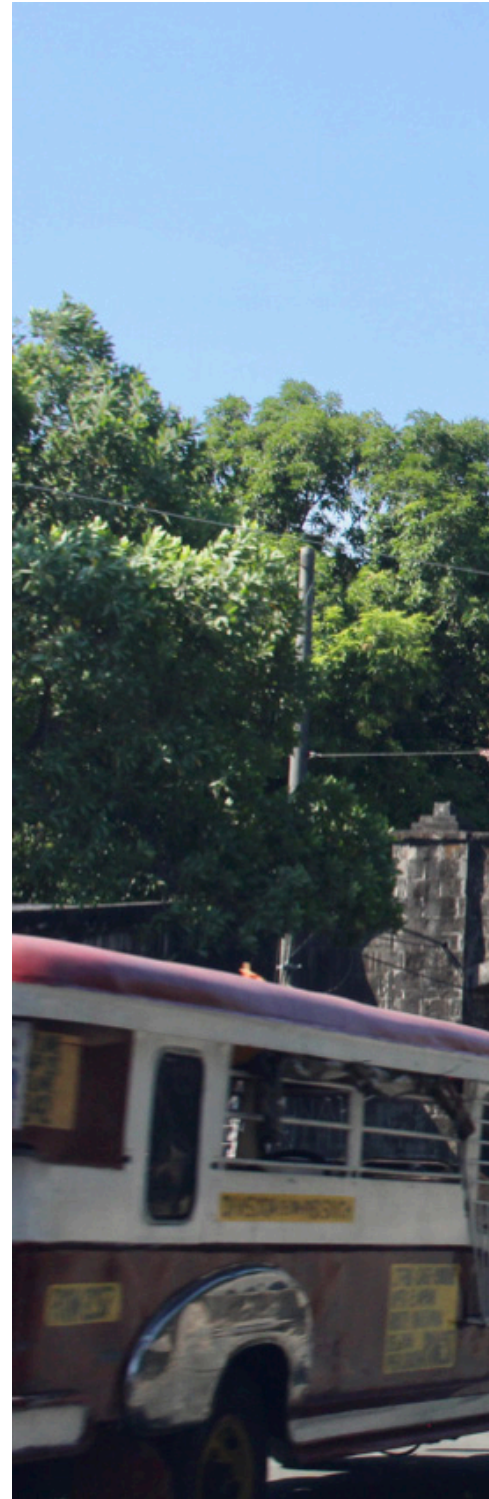




Figure 1.3: Map of Metro Manila showing the walled city of Intramuros along Manila Bay, in relation to other central business districts (CBDs) in Metro Manila.



Figure 1.4: Map of the Philippines showing the location of Metro Manila







Figure 1.5: Fort Santiago was a military outpost that was located at the mouth of the Pasig River. The Walled City of Intramuros was built adjacent to the Fort in 1590.

1.1 - Intramuros / Extramuros – Spatial Divisions as a Framework for Urban Inequality

Throughout Manila's history, various economic conditions, colonial, and political actors, have influenced the city's growth in order to legitimize their rule and economic aspirations.⁵ Manila's urban fabric has always been divided into two spatial designations: the *intramuros* (within the walls) and the *extramuros* (beyond the walls).⁶ Named after the walled city of Intramuros, multiple instances of the *intramuros* are dispersed throughout the city and have become enclaves that are usually reserved for wealthier or privileged individuals. Today, these enclaves take many forms: gated residential communities, central business district/global cities, military bases, and other government compounds. These spatial designations are often manifested through the building of walls or other secure boundaries, which disproportionately influence the way Manileños view and value the urban areas in which they live. The areas that surround these enclaves are then known as the *extramuros* which are urban areas inhabited by people who have historically been restricted from living within the *intramuros*.⁷ The *intramuros* becomes an ideal space that validates the colonial or economic regime that builds them, while the *extramuros* is a space that grows organically through individual acts of city building.

5 Gavin Shatkin, "Colonial Capital, Modernist Capital, Global Capital: The Changing Political Symbolism of Urban Space in Metro Manila, the Philippines," *Pacific Affairs* 78, no. 4 (2005), 577.

6 Robert Reed, *Colonial Manila: The Context of Hispanic Urbanism and Process of Morphogenesis (Berkley and Los Angeles California: University of California Press, 1978)*.

7 Gerard Lico, *Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines (Quezon City: The University of the Philippines Press, 2008)*.



Figure 1.6: Gate to Fort Santiago



Figure 1.7: Buildings built by the Spanish colonial government within Intramuros

Adjacent to Fort Santiago on the mouth of the Pasig River, the 3,196m perimeter, 14m thick pentagonal walls of Intramuros were built in the year 1590. Initially constructed as a “politico-religious nerve centre and a material symbol of Spanish Authority”, the walled city of Intramuros became a trading post and village that protected Spanish inhabitants from the non-Europeans who lived outside of the walls. Laws were put into place that excluded the non-European population from inhabiting Intramuros creating an apparent ethnic divide. Intramuros itself was designed based on ordinances set by King Philip II in the *Leyes de Indias*, which became a successful framework in creating spaces for racial and social differentiation, due to the construction of buildings and public spaces which primarily housed and served the Spanish inhabitants.⁸ Beyond the walls of Intramuros, were the neighbourhoods and villages of the *extramuros*. The villages of Binondo, Malate, Quiapo, Dilao were mainly inhabited by Filipinos, Chinese, and Japanese merchants, who were placed under heavy surveillance by the Spanish authorities, in order to subvert any rebellion against the ruling colonial regime.⁹ The urban growth of the *extramuros* differed from that of the Intramuros since the Spanish colonial government did not impose similar ordinances such as the *Leyes de India*, resulting in an incremental and unstructured growth.¹⁰ Historically, tradespeople, farmers, and fisherfolk would establish their livelihoods in the *extramuros*. Larger enterprises — which support the facilitation of global trade, the seat of government, and the church — are then established within the *intramuros*. The establishment of *intramuros/extramuros* boundaries by the Spaniards is an urban pattern that continues to this day.

⁸ Lico, *Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines* Gerard Lico, *Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines (Quezon City: The University of the Philippines Press, 2008)*.

⁹ *Ibid*

¹⁰ Robert Reed, *Colonial Manila: The Context of Hispanic Urbanism and Process of Morphogenesis (Berkley and Los Angeles California: University of California Press, 1978)*.



Figure 1.8: Shops in the extramuros neighbourhood of Binondo.

Figure 1.9: Street food vendors and merchandise set up on the sidewalk



Figure 1.10: Street food vendors set up shop within alleyways



Figure 1.11: Housing blocks in Binondo

After Spain was defeated during the Spanish-American War, the Philippines then became an insular territory belonging to the United States in 1898. During this time, the U.S Army established multiple military bases outside the urban centre of Manila, in an attempt to pacify rebel forces and survey Filipino villages. Estela Duque, author of *Militarization of the City*, argues that military planning had a significant impact on the civilian planning of Manila due to the social laws that controlled both military personnel and civilians.¹¹ Beyond the 5-mile dry zone imposed by the U.S. Army adjacent to military bases, one could find an urban zone that allowed for the consumption of liquor, brothels, and other “houses of ill-fame”.¹² In this case, military bases are designated as an *intramuros*, where army personnel are expected to adhere to military rules and schedules, while the *extramuros* became a space for illicit activities.

By December 1904, Daniel H. Burnham was commissioned by the United States government to create an urban plan for Manila. *The Manila Plan* became a framework for the expansion of the city surrounding Intramuros. Public spaces and buildings were designed in the neo-classical style in order to enable President William McKinley’s policy of “Benevolent Assimilation”.¹³ Other proposals include: the conversion of Bagumbayan Field/Camp Wallace into Luneta Park that envisioned a government centre modelled after The National Mall in Washington D.C., and the zoning of a public pedestrian promenade along Manila Bay.¹⁴

11 Estela Duque, “*Militarization of the City*,” *Fabrications* 19, no. 1 (2009), 48.

12 Duque, “*Militarization of the City*,” 48

13 Lico, *Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines*

14 Shatkin, “*Colonial Capital, Modernist Capital, Global Capital: The Changing Political Symbolism of Urban Space in Metro Manila, the Philippines*,” 577



Figure 1.12:

The National Museum of Anthropology is an example of neo-classical architecture that was built in the period of American Occupation located in Luneta.

Unfortunately, the Manila Plan did little to address the inequality that was already present within the *extramuros* since it relied on an “opportunistic alliance with the country’s landowning elite”, who were inclined to reinforce the spatial divisions that have been present since Spanish Colonization.¹⁵ World War II marked the end of the American Occupation, and Manila endured heavy destruction by Allied forces in the successful recapturing of Manila from Japanese occupation forces. Although the city was rebuilt slowly, very little of Burnham’s Manila Plan remains today.

The period after World War II saw Manila’s suburbs rapidly transition into new urban areas. Urban expansion was achieved initially through the conversion of the *haciendas* (plantations) owned by Manila’s landowning elite into new central business districts beginning in the 1950s. Later, this occurred through the reclamation of land along Manila Bay to create the new Cultural Centre of the Philippines Complex, during the Marcos Era in the 1970s. Later, the sale of raw lands from military bases beginning in the 1990s established new central business districts.¹⁶ Through each act of redevelopment, real estate developers control and manage the construction of necessary city infrastructure, and the zoning of residential and commercial areas within the confines of their urban megaprojects.¹⁷ Manila’s spatial divisions are then reinforced through the popularity of high-end gated residential communities amongst the wealthy, as they surround dense urban commercial centres which further increase the land values of these new cities.

¹⁵ *Ibid*, 577

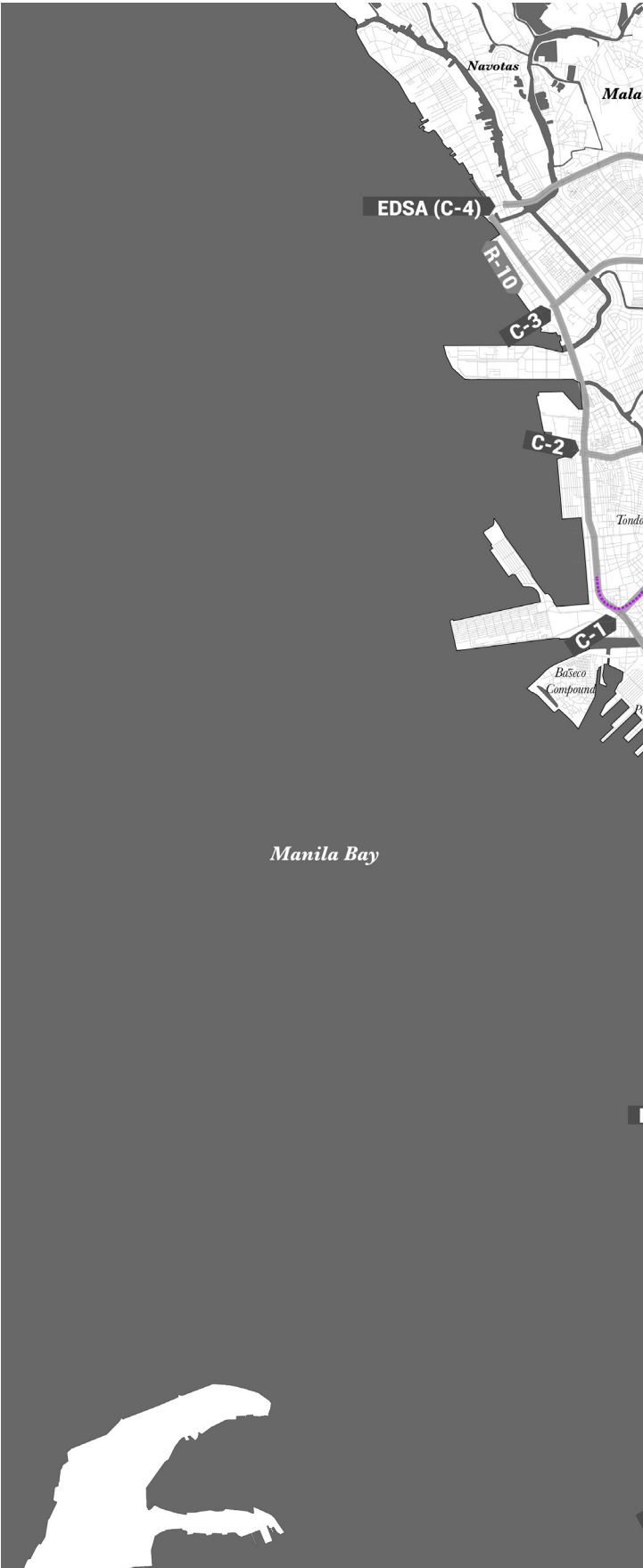
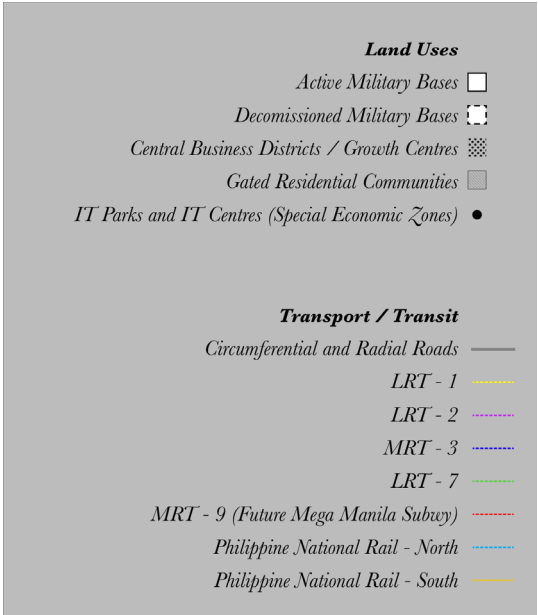
¹⁶ Otto Van Den Mujzenberg and Ton Van Naerssen, “Metro Manila: Designers or Directors of Urban Development?” in *Directors of Urban Change in Asia*, ed. Peter J.M. Nas, Vol. 9 (Milton Park: Routledge, 2005), 126.

¹⁷ Gavin Shatkin, “The City and the Bottom Line: Urban Megaprojects and the Privatization of Planning in South East Asia,” *Environment and Planning* 40, no. 2 (2008), 338.

The spatial divisions of the *intramuros/extramuros* have shaped the way that Manileños view the urban spaces that they live and work in. Each urban mega project, from the walled city of Intramuros, to the country's favoured central business districts of Makati, Ortigas, and Bonifacio Global City, have created high-end enclaves which project a globalised image of how cities in the Philippines should be designed. In *Globalization and Its Discontents*, Saskia Sassen argues that global cities, or in the case of Manila, the *intramuros*, become sites where the global elite become comfortable with their surroundings due to the modern amenities, infrastructure, buildings, and public spaces they offer.¹⁸ The adoption and preference of western planning principles in the *intramuros* is evidence that the living conditions of those who live within the walls are often prioritized, while the needs of those who live in the *extramuros* are neglected.

¹⁸ Saskia Sassen, *Globalization and its Discontents* (New York: The New Press, 1998).

Figure 1.13: Map showing the radial and circumferential roads, and MRT lines which connect different municipalities in Metro Manila to each other.



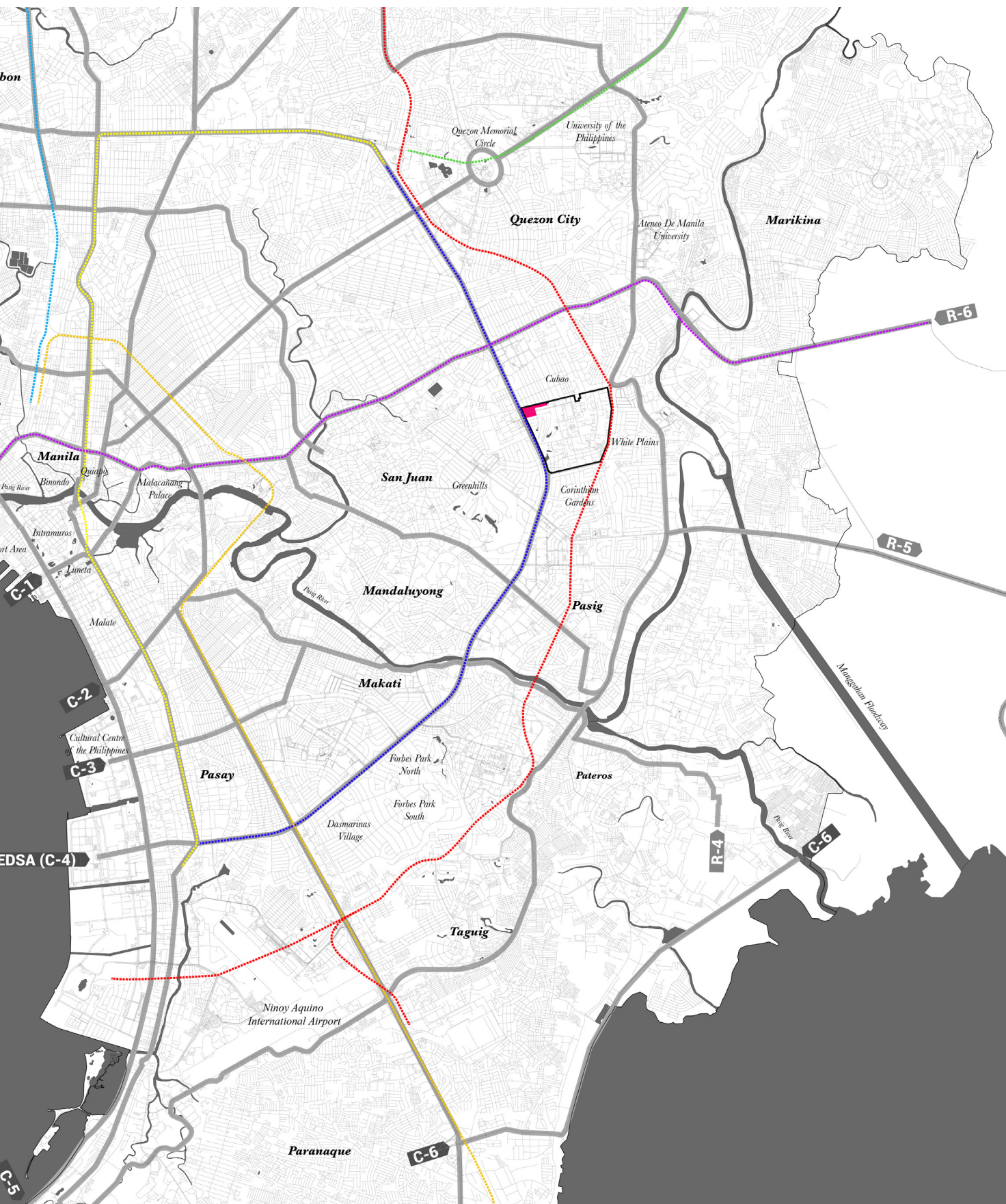
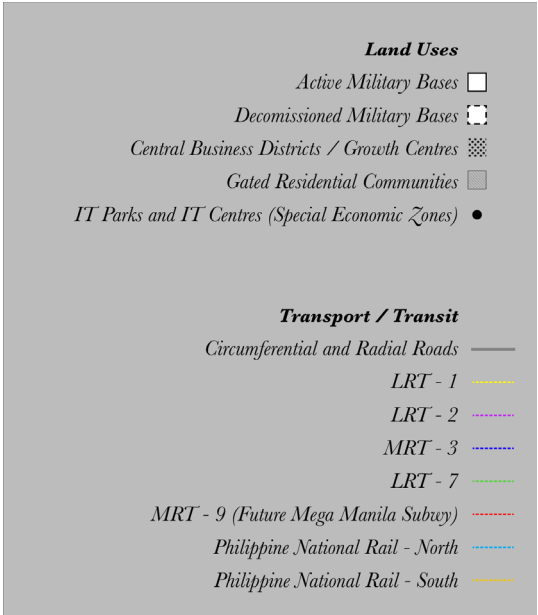


Figure 1.14: Map showing the active and decommissioned military bases in Metro Manila



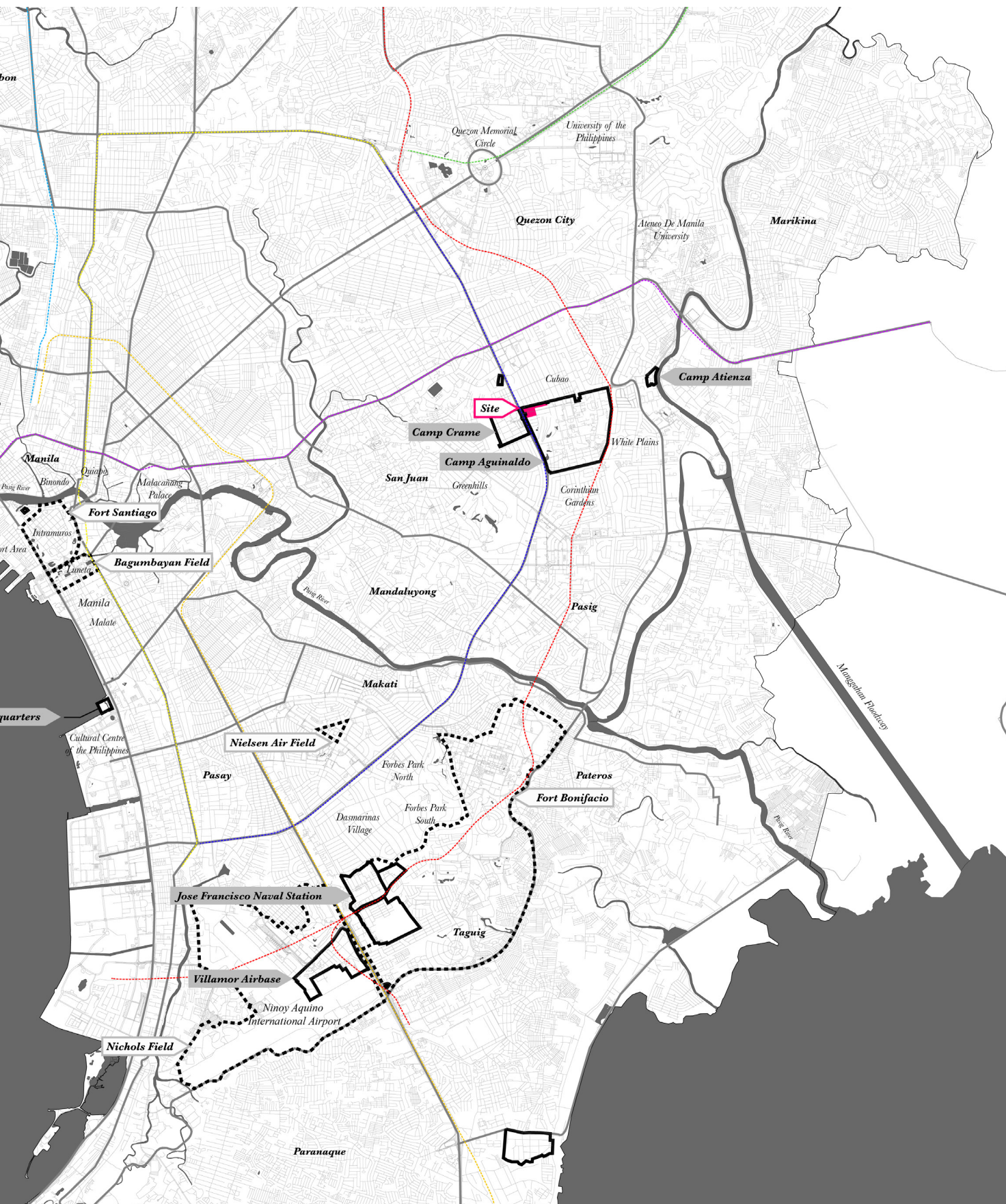
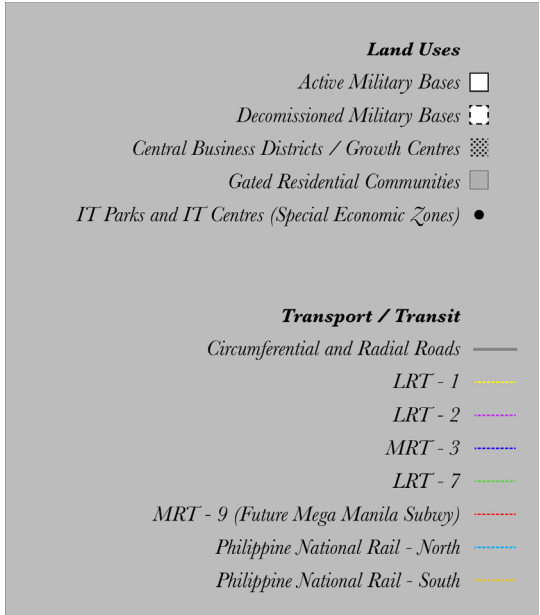


Figure 1.15: Map showing various central business districts and gated communities in Metro Manila



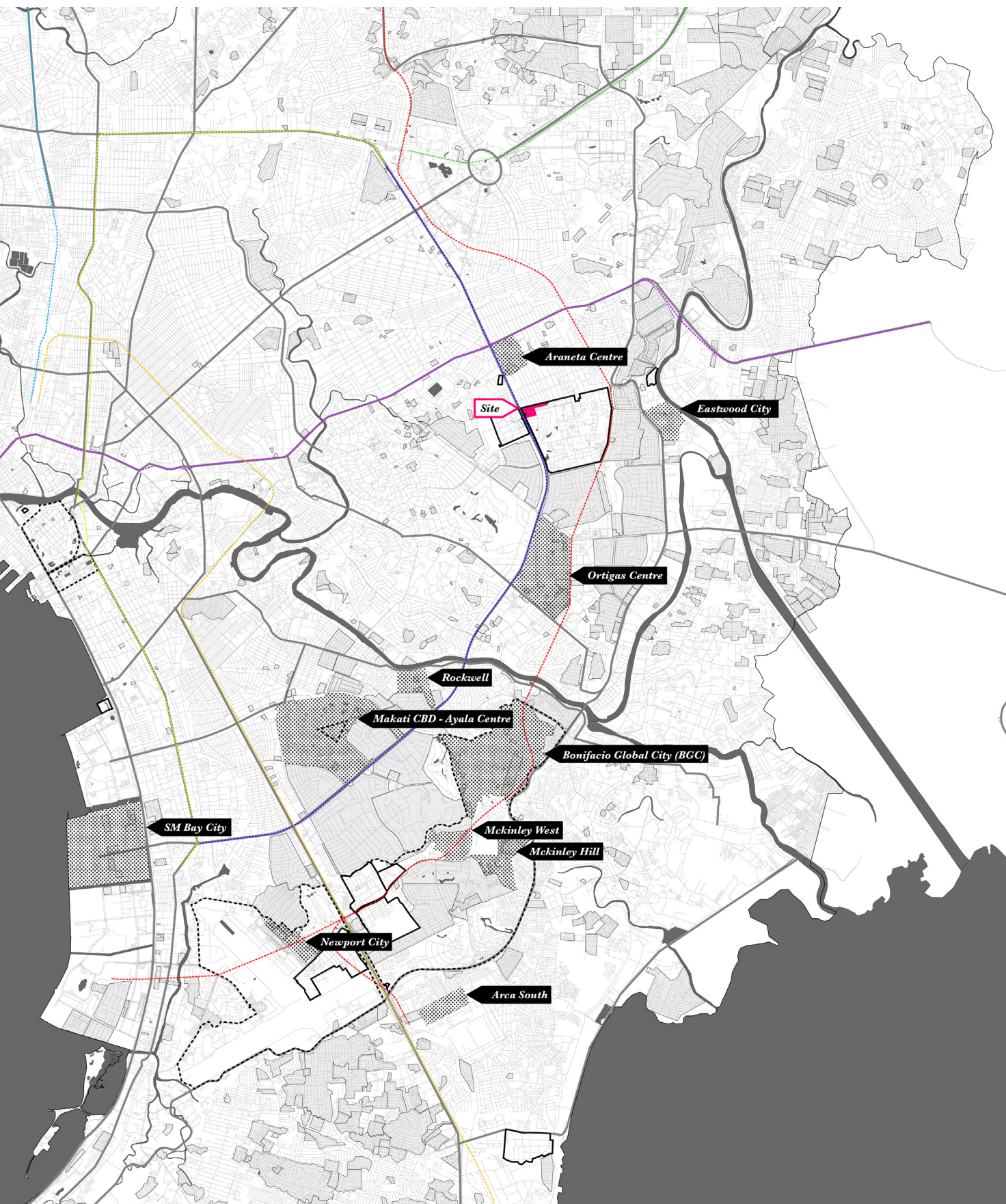




Figure 1.16: Bonifacio Global City is the Philippine's premier central business district, located in the former Fort Bonifacio. Ortigas CBD can be seen in the background

1.2 - From Military Bases to Global Cities

Metro Manila's many central business districts, or global cities, have fully transformed from the *haciendas* they once were, into dynamic commercial and residential districts. Capitalizing on the land that Manila's wealthy families owned, the success of these urban megaprojects have turned the elite landowning class into the country's most influential developers such as Ayala Land, Ortigas Company, Araneta Group, Megaworld, SMDCI, and Lopez Group of Companies. Global cities are defined as "centres for the servicing and financing of international trade, investment, and headquarter operations", and in the Philippines, multiple central business districts (CBDs) – or global cities – act as islands of globalisations which caters to multinational corporations.¹⁹ Today, Metro Manila has up to 12 CBDs with more being planned as the government begins to sell remaining parcels of military lands and approve future land reclamation projects along Manila Bay. This thesis primarily focuses on the conversion of military bases into new global cities.

By the 1990s, Makati CBD and Ortigas Centre had become two of the country's largest CBDs. In response to Metro Manila's rapid urbanization and the shortage of available land, the administration of President Corazon Aquino created the Bases Conversion and Development Authority (BCDA).²⁰ BCDA facilitates the sale and transfer of remaining parcels of raw lands within military bases designated to the Armed Forces of the Philippines (AFP). The revenue generated through these transactions aims to provide funds the Armed Forces of the Philippines Capability Upgrade Program, which will provide new and modern equipment for

¹⁹ *Ibid*

²⁰ "About Us - Company Profile," Bases Conversion and Development Authority, accessed February, 19, 2020, <https://bcda.gov.ph/about-us>.

all branches of the AFP.²¹ The government's decision to convert these lands from military uses into higher economic and civilian uses has become instrumental in creating an environment that is attractive to foreign direct investment in the country due to the sudden oversupply of valuable raw lands within Metro Manila.²² As a result, new central business districts have emerged around Metro Manila.

Converting these lands into new urban districts catalysed the growth of export-oriented industries such as BPO, an increase in foreign direct investment, and a boom in the real estate sector. Gavin Shatkin, author of the *City and the Bottom Line*, argues that the Philippine government has had to deal with "intense fiscal and external pressures", due to the economic decline, a debt crisis, and the rampant corruption the country experienced during and after the fall of President Ferdinand Marcos' administration in 1986.²³ This resulted in the liberalization of economic policies, and the over-reliance on the private sector in the creation of jobs, and the building of urban infrastructure through public-private partnerships beginning in the 1990s.²⁴ Shatkin coins the term *bypass-implant urbanism*, a process in which real estate developers take advantage of real estate tax incentives, facilitate the creation of special economic zones, and assume full responsibility of the urban planning process within

21 Prosoco Mundo, "Land Conversion: Transforming Urban Military Baselands to Higher Economic Uses," *Journal in Urban and Regional Planning* 1, no. 1 (2014), 16.

22 Mundo, "Land Conversion: Transforming Urban Military Baselands to Higher Economic Uses," 16

23 Gavin Shatkin, "The City and the Bottom Line: Urban Megaprojects and the Privatization of Planning in South East Asia," *Environment and Planning* 40, no. 2 (2008), 338.

24 Shatkin, "The City and the Bottom Line: Urban Megaprojects and the Privatization of Planning in South East Asia", 338

their own urban megaprojects, which diminishes the role that public municipal planners have in creating an inclusive urban vision for Metro Manila.²⁵ The process of *bypass-implant urbanism* is manifested in the development of Bonifacio Global City (BGC), a premier central business district located in decommissioned parcels of land within Fort Bonifacio.

In 1992, out of the 440 hectares of raw land available in Fort Bonifacio — the headquarters of the Philippine Army Branch of the AFP — the BCDA sold 150-hectares to the Bonifacio Land Development Corporation (BLDC) which is owned by real estate developer Metro Pacific Group.²⁶ Metro Pacific hired American architecture and planning firm Hellmuth, Obata + Kassabaum (HOK) to plan the country's newest global city: "Bonifacio Global City" (BGC).²⁷ HOK's masterplan designated six distinct urban residential and commercial neighbourhoods connected by two north-south and east-west pedestrian axes which hosted with a series of public spaces, green spaces, street level retail, and pedestrian friendly streets; the plan attempts to emulate the urban design of globalised cities such as Paris, Singapore, Vancouver, and New York.²⁸ Much like the walled city of Intramuros that became the political and religious nucleus for the Spanish colonizers, BGC aimed to become "the nucleus of Philippine Progress in the 21st Century".²⁹ Subsequently, the Asian Financial Crisis in 1997 forced Metro Pacific to sell

25 *Ibid*, 338.

26 *Ibid*, 338.

27 *Ibid*, 338.

28 Sara Liss-Katz, "Fort Bonifacio Global City: A New Standard for Urban Design in Southeast Asia," in *City Space + Globalization: An International Perspective*, ed. Hemalata C. Dandekar (Ann Arbor, Michigan: College of Architecture and Urban Planning, The University of Michigan, 1998), 63.

29 Bernadette Jalbuena and Gissel B. Blanco, "Bonifacio Global City Master Plan" City of Development Planning Office, Taguig, Metro Manila, Philippines, 2007).

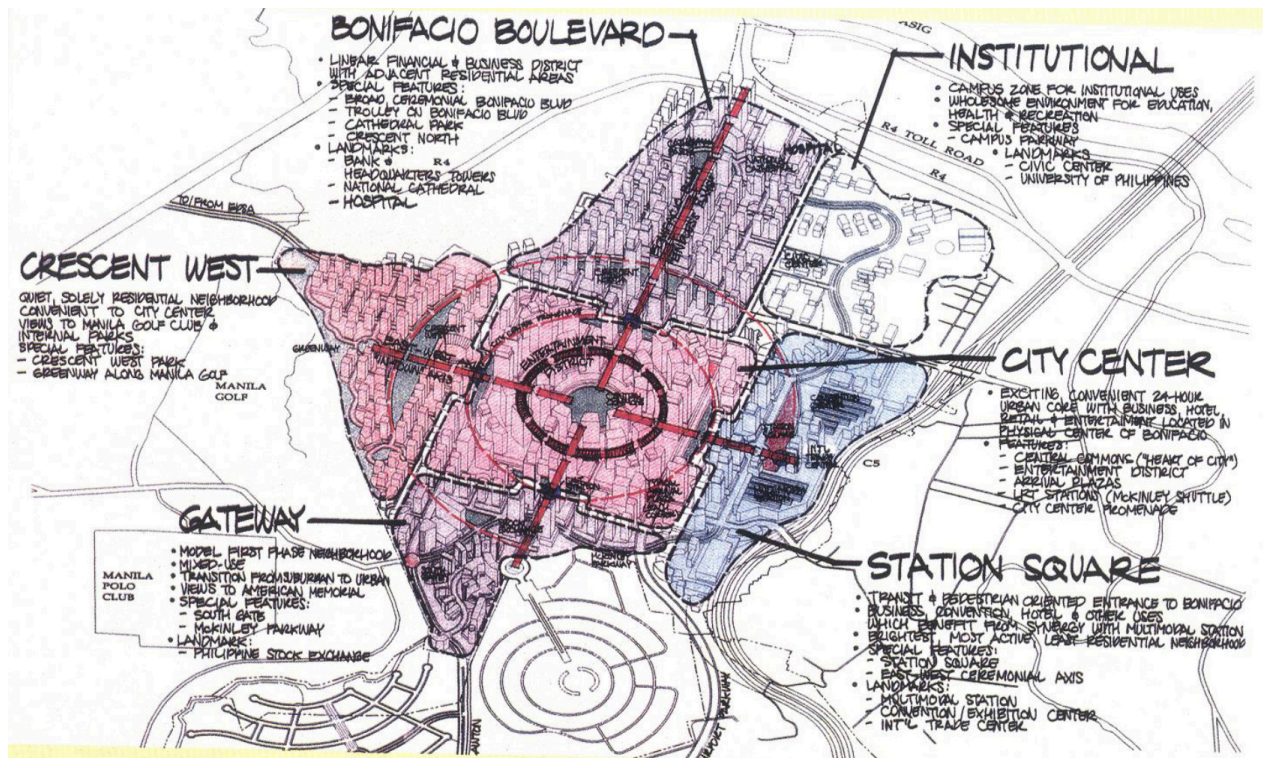


Figure 1.17: Concept diagram by HOK. The plan connected six distinct neighbourhoods via two pedestrian axes which converge in the centre of BGC.

a controlling portion of the development — the southern “Big Delta” portion — to Ayala Land.³⁰ Ayala deviated from HOK’s original masterplan by converting numerous public spaces into commercial lots, and building only one pedestrian axis along Ayala’s property, disconnecting it from the northern portion owned by Metro Pacific. In this case, multiple real estate developers implanted, altered, and executed their own urban visions in order to maximise profits and increase the value of their own urban megaprojects.

The BCDA is encouraging similar urban developments within military lands which they hope to dispose of throughout the country, such as the remaining parcels in Fort Bonifacio, Clark Airbase, and many more. While the development of BGC has been instrumental in generating new commercial office space for the growing BPO industry, the needs of BPO workers have not been addressed due to the lack of affordable housing within this globalised enclave. Without the role of municipal planners to ensure inclusive city planning, BGC will continue to price out this young and emerging demographic.

³⁰ Shatkin, “*The City and the Bottom Line: Urban Megaprojects and the Privatization of Planning in South East Asia*,” 338



Figure 1.18: Satellite image of BGC taken in 2004 partially shows a circular road network that HOK proposed in the original masterplan.



Figure 1.19: Satellite image of BGC taken in 2018. The Ayala Corporation deviated from the original masterplan and implemented their own scheme — the most obvious change is the implementation of a grid street network



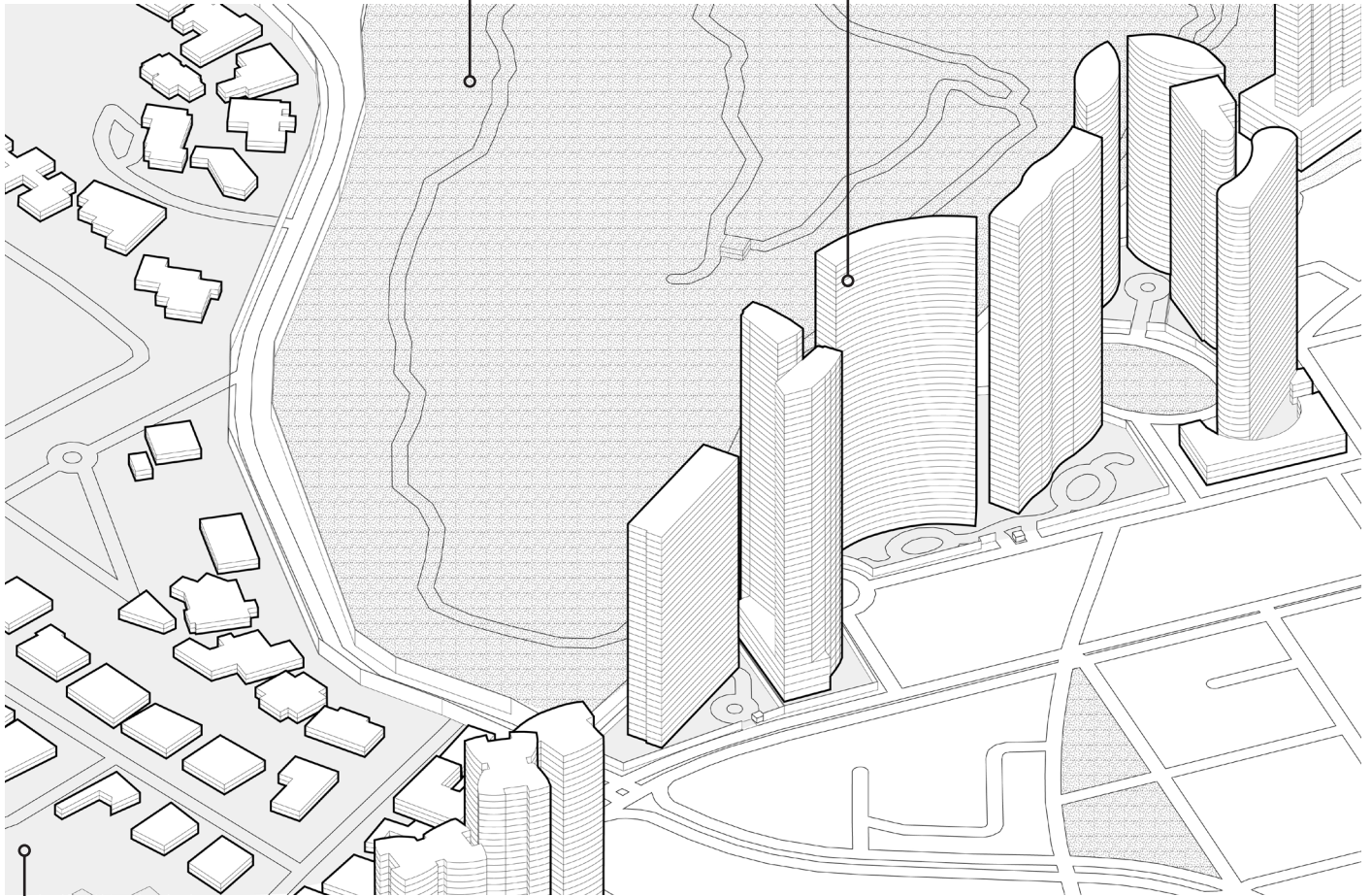
Figure 1.20: High-End residential buildings in Bonifacio Global City. The Manila American Cemetery can be seen in the background, which is located in Fort Bonifacio



Figure 1.21: Makati CBD from Bonifacio Global City. These CBDs are special and exclusive enclaves that adhere to globalised urban planning principles.

Manila Golf
Private Golf Course

High End Condominiums
View of Golf course and
the surrounding gated
communities. “Central Park”
like effect



Forbes Park South
High-end residential gated community primarily consisted
of large single-family homes

Figure 1.22: Diagram showing high-end housing in BGC and the surrounding areas.



Figure 1.23: One McKinley Place and Pacific Plaza Towers were the first luxury condominiums to be developed in BGC

Figure 1.24: Other examples of high-end luxury condominiums

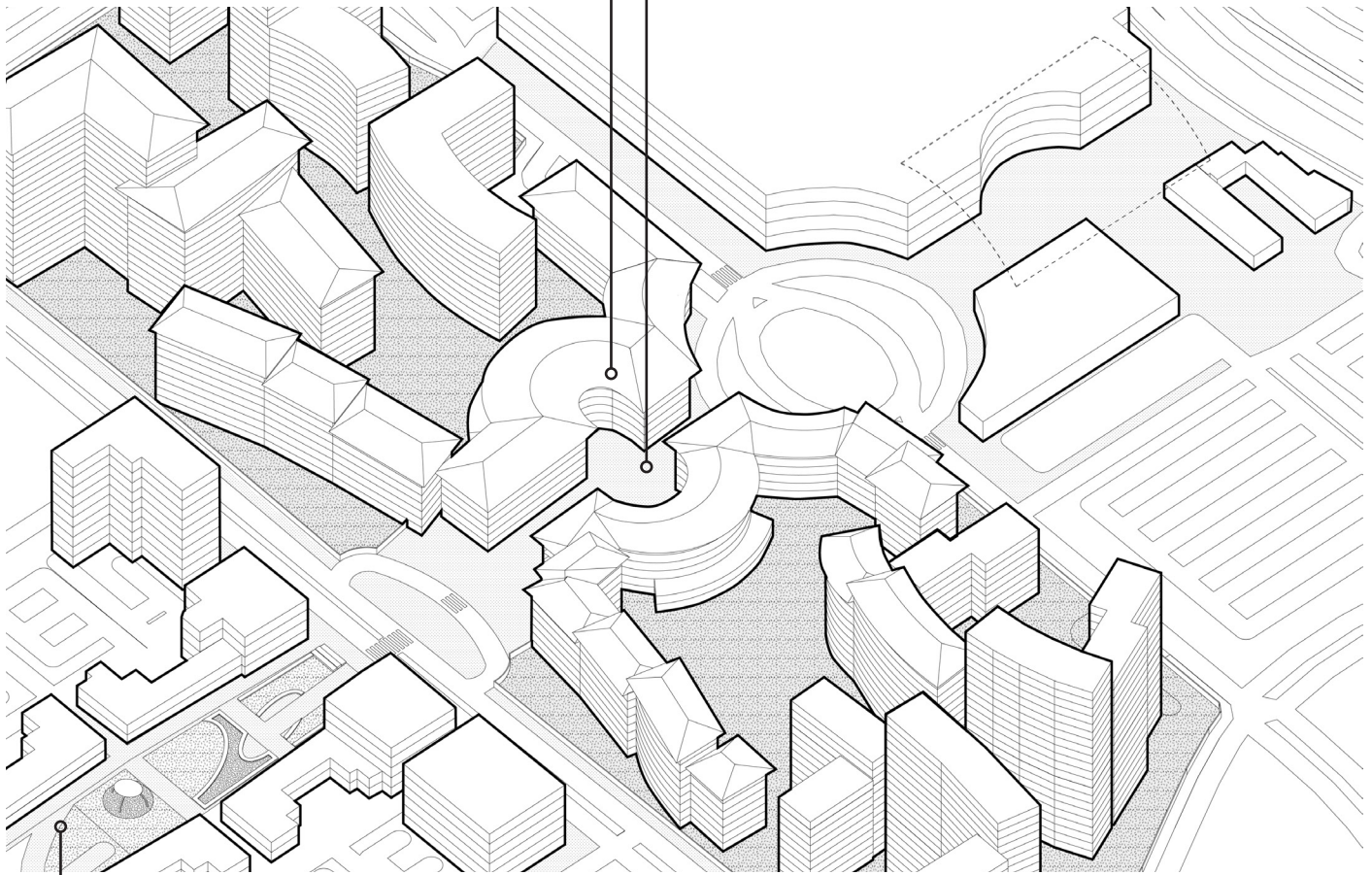
One Serendra

Mid-Rise Development with courtyard-like green spaces. Acts as a gated community, as these spaces are reserved for residents.

Serendra High St

In between Market!Market! and Bonifacio High St

Mostly restaurants on the ground floor, with some retail on the second floor

**Bonifacio High St**

Connects the East and West sides of BGC - Pedestrianized zone lined with high end retail stores, restaurants, with a park-like public space in the centre

Figure 1.25: Diagram showing mid-rise housing in BGC, and Bonifacio High St — a pedestrianised retail street connecting the east and west areas of BGC



Figure 1.26: The Serendra development by Ayala Corporation
Figure 1.27: Bonifacio High St



Figure 1.28: Photos of Bonifacio High St



Figure 1.29: Food delivery drivers waiting for online orders in the shade



Figure 1.30: Call Centre in Makati

1.3 - BPOs and SEZs

Industry stakeholders and government officials have worked together to ensure the growth of the Business Process Outsourcing (BPO) industry through the creation of Special Economic Zones (SEZs). Laws that have been enacted incentivize the establishment of SEZs and BPOs, which create spaces that operate under different and favourable labour and tax codes for firms— a trend that Saskia Sassen defines as the *denationalising of land*.³¹ Under the administration of President Fidel V. Ramos, the government established the Philippine Economic Zone Authority (PEZA) and enacted the *Special Economic Zone Act of 1995*, which became a legal frame work for the establishment of SEZs for export-oriented industries such as BPO.³² While the *Special Economic Zone Act of 1995* has been instrumental to the growth of the BPO industry, the denationalising of land has created spatial inequalities within the city, which diminishes the role of the state through the tax incentives given to these firms.

While SEZs have historically been associated with the manufacturing industry, PEZA allows for other growing industries to designate their spaces for production as SEZs such as: IT parks/centres, free ports, agro-industrial economic zones, manufacturing economic zones, medical tourism parks/centres, and tourism economic zones. The goods and services produced inside SEZs are subject to different trade laws and tax incentives, which make it financially feasible for corporations to set up in the country. Additionally, real estate developers also benefit from the *Special Economic Zones Act* since they are exempt from paying certain property and development taxes when constructing

³¹ Saskia Sassen, "Losing Control?: Sovereignty in an Age of Globalization," Columbia International Affairs Online (1996).

³² REPUBLIC ACT NO. 7916 - the Special Economic Zone Act of 1995, (1995): http://congress.gov.ph/legisdocs/ra_09/Ra07916.pdf.



Figure 1.31 : An example of an IT Park in Metro Manila

buildings with designated SEZs.³³ Therefore, many of these IT parks/centres are located within Manila's global cities. Since the Act was put into law, the government has approved a total of 379 SEZs, 262 of which are IT parks/centres where BPO offices operate.³⁴ IT Parks are usually defined as a newly constructed building or a cluster of buildings within a secured estate, while IT Centres are designated floors within a building. The larger share of IT parks/centres compared to other SEZs is evidence that creating new sites for BPO is a safe investment.

Business Process Outsourcing (BPO) is a “method of subcontracting various business-related operations” in order to take advantage of the reduced cost of labour in different parts of the world.³⁵ Of the different subsectors within the BPO Industry in the Philippines, information technology services employ almost 1.16 million people as of 2016, with a projected to employment up to 1.8 million people by 2022.³⁶ IT-BPO jobs primarily consist of back-office work for call centre agents, software engineers, animators, accountants and other financial services, virtual assistants, and many more. Call centres however, make up majority of the industry, and multinational firms have described the Philippines' labour face as having a high English proficiency rate with a “neutral” and easy to understand English

33 Jana Maria Kleibert, “Islands of Globalisation: Offshore Services and the Changing Spatial Divisions of Labour,” *Environment and Planning A: Economy and Space* 47, no. 4 (2014), 884.

34 “Operating Economic Zones,” *Philippine Economic Zone Authority*, last modified November 13, accessed 02/25, 2020, <http://www.peza.gov.ph/index.php/economic-zones/list-of-economic-zones/operating-economic-zones>.

35 “Business Process Outsourcing (BPO),” *Investopedia*, last modified May 23, accessed 02/25, 2020, <https://www.investopedia.com/terms/b/business-process-outsourcing.asp>.

36 *IT & Business Processing Association Philippines*, “Accelerate PH Future Ready Roadmap 2022: The Philippine IT-BPM Sector - Executive Summary,” (2016).



Figure 1.32 : Certain floors of this commercial office building are designated as IT Centres

accent.³⁷ Today, the Philippines is the preferred destination for the establishment of call centres, and has surpassed India in this subsector of the BPO industry.

BPO workers earn at least double the minimum wage in Metro Manila — current minimum wage in the National Capital Region (NCR) is set to ₱447.87 a day (\$11.77 CAD/day) for non-agricultural workers, which equals to ₱8,957.40 a month (\$235 CAD/month).³⁸ Over 52% of rank and file employees earn between ₱15,000 to ₱25,000 a month (\$394 to \$652 CAD/month), while workers with higher positions — such as supervisors, management, directors — can earn up to ₱35,000 to ₱200,000+ (\$920 to \$5,259 CAD/month).³⁹ Over 72% of recent hires are recent university graduates aged 25-30 years old, and are often hired based on their English proficiency and computer literacy, regardless of their educational background.⁴⁰ While this younger demographic is attracted to the higher pay, some face a shifted schedule working at night to serve western clients, working during Philippine statutory holidays since their clients abroad require their services, and often feel a form of social isolation since they must adjust to a schedule that differs from their friends and families. Nonetheless, many recent university graduates are attracted to these jobs.

37 Andy Hoffman, “Call Centres are Philippines’ New Long-Distance Love Affair,” *The Globe and Mail* 2012. <https://www.theglobeandmail.com/report-on-business/call-centres-are-philippines-new-long-distance-love-affair/article4098533/>.

38 “Current Real Minimum Wage Rates,” Department of Labour and Employment, last modified January 01, accessed February 27, 2020, <https://nwpc.dole.gov.ph/stats/current-real-minimum-wage-rates/>.

39 Guevara, Determining the Housing Demands of BPO Workers

40 Nedelyn Magtibay-Ramos, Gemma Estrada and Jesus Felipe, “ERD Working Paper no. 93 - an Analysis of the Philippine Business Process Outsourcing Industry” Asian Development Bank, Manila, Philippines, 2007).

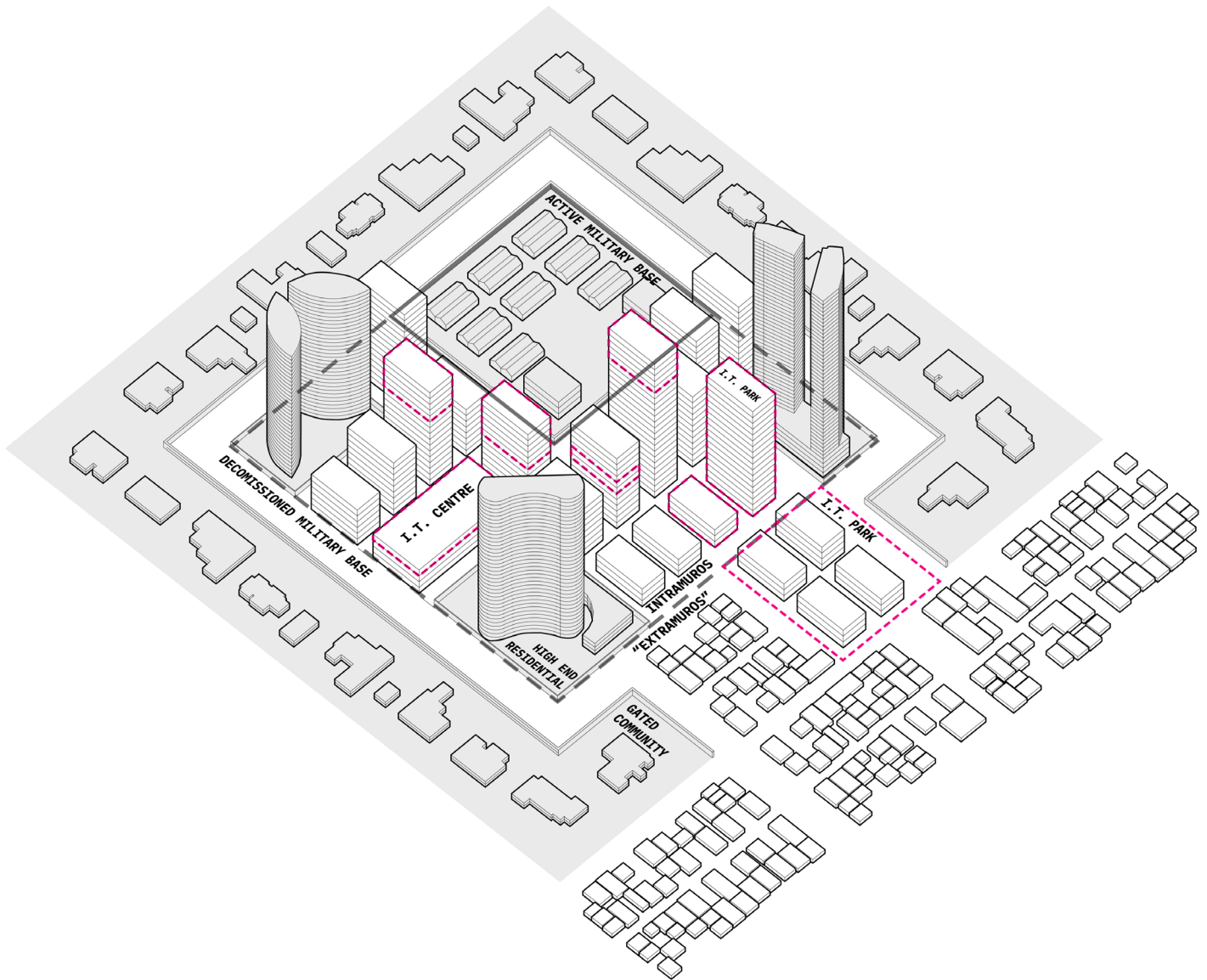
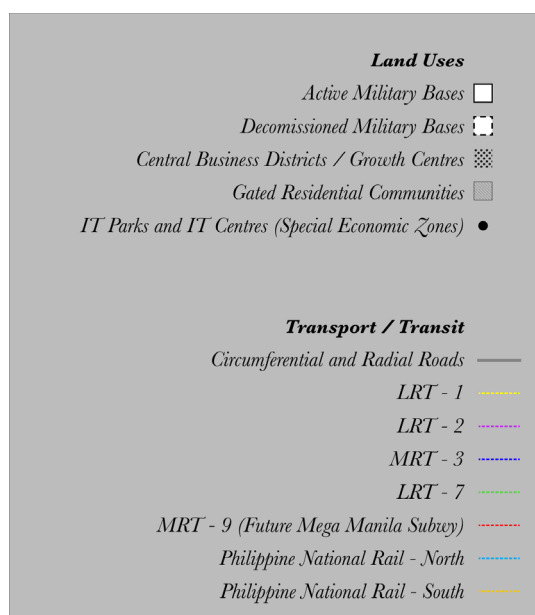


Figure 1.33: Diagram of the typical development strategy for | global city showing SEZs, IT Parks, IT Centres, boundaries of active and decommissioned military bases, as well as the intramuros and extramuros boundaries

The BPO Industry's growth has had a positive impact on the economy, due to increased real estate development, foreign direct investment, and increased employment of skilled individuals. Today, BPO is the second largest contributor to GDP after remittance flows from Overseas Filipino Workers (OFWs) — a source of income that relies on overseas migrant workers sending money to support their families in the Philippines.⁴¹ This growth is seen as a structural economic shift that provides the opportunity for young Filipinos to find employment locally. While the Philippine government has created public agencies and have enacted laws which have catalysed the industry's growth, some of the economic benefits are not entirely shared with BPO workers — especially in the provision of housing. As more people will be employed in BPO in Metro Manila, the demand for affordable housing close to work will increase.

⁴¹ Clark Bautista, *"IT-BPO Industry's Direct & Indirect Economic Impact: The Outsourcing Multiplier Applied to the Philippines and Indian Economies,"* Tholons Whitepaper (2011).

Figure 1.34: Map showing the location of IT Parks and IT Centres in Metro Manila. Large clusters of these SEZs are located within CBDs



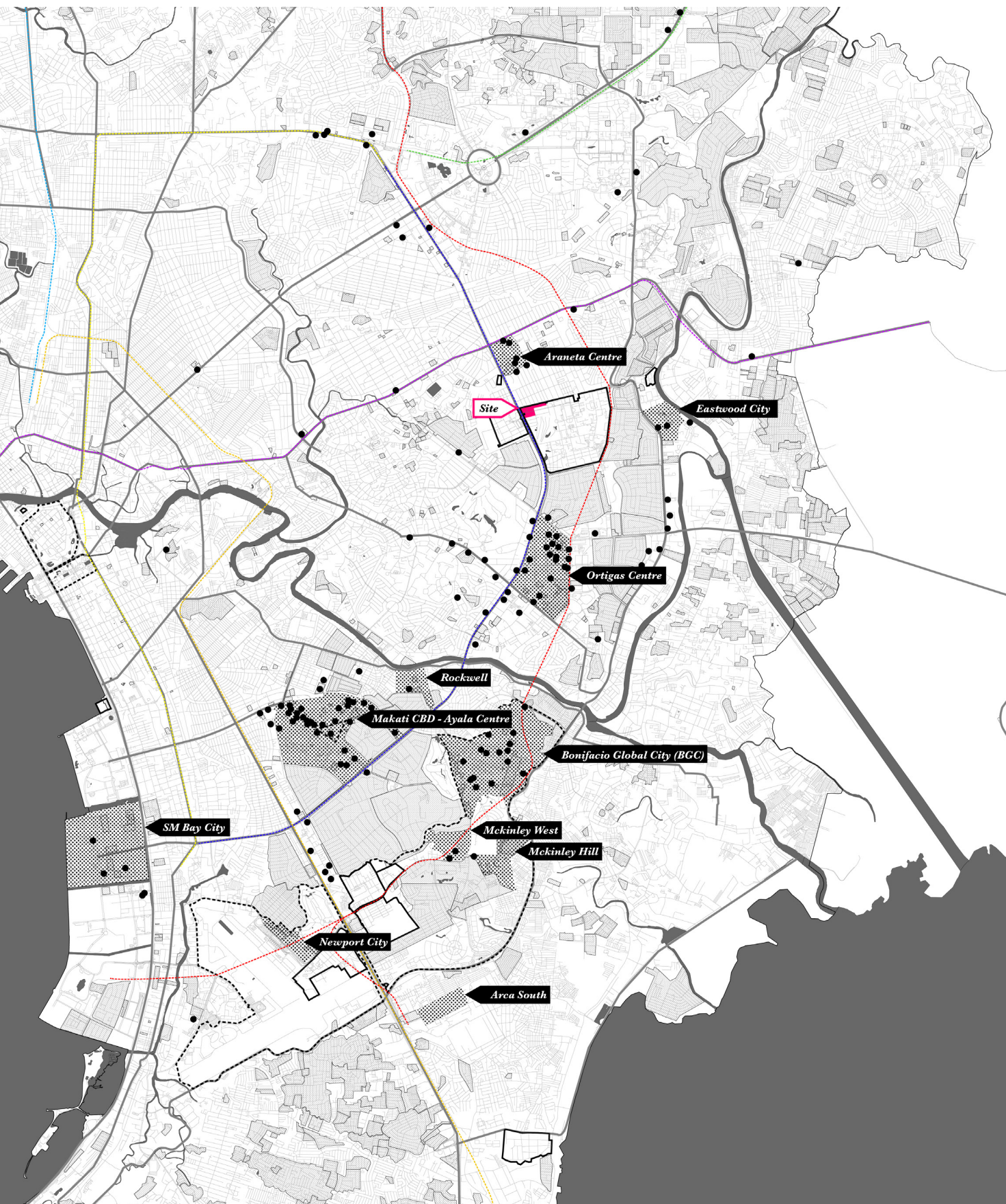




Figure 1.35: Street life at night in the extramuros neighbourhood of Guadalupe Nuevo in Makati

1.4 - Where do BPO Workers live?

Unlike other countries in Asia with national public housing programs, such as Singapore, the Philippine government has not developed a housing strategy. As an alternative, the Department of Human Settlements and Urban Development (DHSUD) manage the Pag-IBIG Fund, which is a national savings program that provides financing for affordable shelters, and housing loans up to ₱6,000,000 (\$158,332 CAD).⁴² In terms of the construction and development housing, the private sector has mostly addressed the housing shortage.

Since the growth of the BPO industry beginning in the early 2000s, developers have attempted to address affordability by marketing graduated pricing models for various housing developments — such as Ayala’s *Avida* or *Amaia* developments which are priced significantly lower to their *Ayala Land Premier* and *Alveo* developments. Regardless of where developers choose to locate these developments — either within a CBD (*intramuros*) or within the *extramuros* — the high price and small size of these units make them unattainable to BPO workers or professionals with similar incomes, allowing OFWs or foreign investors to purchase these units as assets instead. As a result, younger BPO workers may choose to live in affordable dormitories located in *extramuros* neighbourhoods adjacent to CBDs. Meanwhile those with families may choose to live in far-flung suburbs and endure long commutes ranging from 2-4 hours in each direction.

Within the *extramuros* neighbourhoods of Manila, a variety of housing types are present. A portion of these types are

⁴² “History of Pag-IBIG Fund,” accessed March 5, 2020, <https://www.pagibigfund.gov.ph/history.html>.



Figure 1.36: Example of Avida developments by the Ayala Corporation

dormitories, which come in the form of converted single family homes, small additions adjacent to single family homes, or low-rise apartment buildings. Rents for a bunk bed range from ₱4,000 - ₱10,000/month (\$108-\$216 CAD/month) depending on how many occupants live in a single dorm. Typically, rooms accommodate 2-4 people and have basic amenities such as a shared washroom, a small kitchenette with a sink and microwave, and minimal closet space for each person. At street level, *extramuros* neighbourhoods host a variety of social functions and micro-enterprises which serve as social infrastructure for the immediate neighbourhood — laundromats, sari-sari stores (convenience stores), karinderias (small restaurant offering cheap home cooked Filipino meals) with tables set up on the street, fruit and vegetable stands, markets, and make-shift basketball courts. These spaces for social interaction are incomparable to those of the public spaces in the CBDs of Makati and BGC, where one could find the globalised and pricier versions of these micro-enterprises, such as convenience stores like 7-11, fast food chains like McDonalds and Starbucks, and a variety of high-end retail stores.

Although the dormitory is seen as a temporary living situation, many will end up living there longer as renting or buying an apartment may be out of reach, or the present housing stock does not meet their needs. Condominium developments such as *Avida* or *Amaia* are small in size, mostly offering studio and one-bedroom apartments ranging from 18.6 sqm to 55sqm, ensuring that occupants will eventually have to move out if they need more space or decide to start a family. Since real estate developers have had more control over the building of multi-unit housing, there has been little authority from the government in ensuring a more inclusive mix of occupant types. In comparison, housing

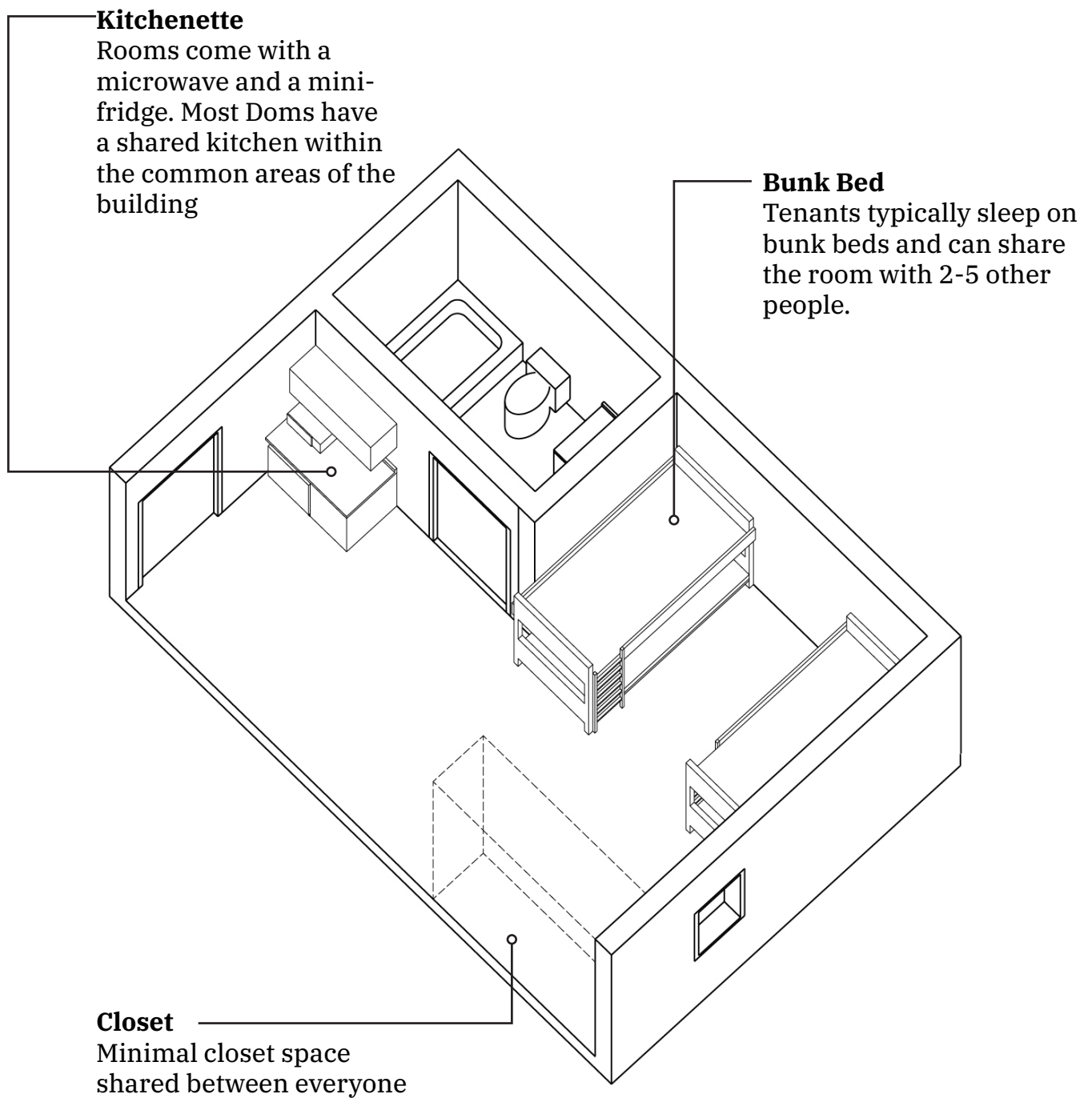


Figure 1.37:Diagram of a typical dormitory

development blocks in Singapore adhere to strict social planning that ensures residents are of different ethnic groups, income levels, age, and family sizes.⁴³ The Singaporean government has been able to house almost 80% of their citizens, with 90% of them acquiring full ownership of their homes.⁴⁴ While there are no social planning policies with respect to housing in the Philippines, there are benefits in ensuring that housing developments can be inclusive to more than one occupant type.

Real estate development practices in Metro Manila need to accommodate the increasing demand for affordable housing close to where many BPO firms are located. While there is financial support available, such as the Pag-IBIG fund which have been successful in providing housing loans to lower income Filipinos, the housing stock presented to potential buyers may not accommodate their future needs. Without any further social planning policies or public housing programs, real estate developers will continue to control the housing market and create housing that do not accommodate the shifting needs of individuals and families. Moving forward, the next phase of this thesis attempts to address this gap in affordable housing, in two phases. First is through a masterplan that prioritises affordable housing and creates connections to the *extramuros* neighbourhood of Cubao. The final phase further develops a building which houses both families in larger apartments and younger BPO workers in dormitories, allowing for a more diverse demographic to inhabit a singular building.

⁴³ Eric Klinenberg, *Palaces for the People: How Social Infrastructure can Help Fight Inequality, Polarization, and the Decline of Civic Life* (New York: Crown, 2018).

⁴⁴ "About Us," last modified December 03, accessed March 9, 2020, <https://www.hdb.gov.sg/cs/infoweb/about-us>.

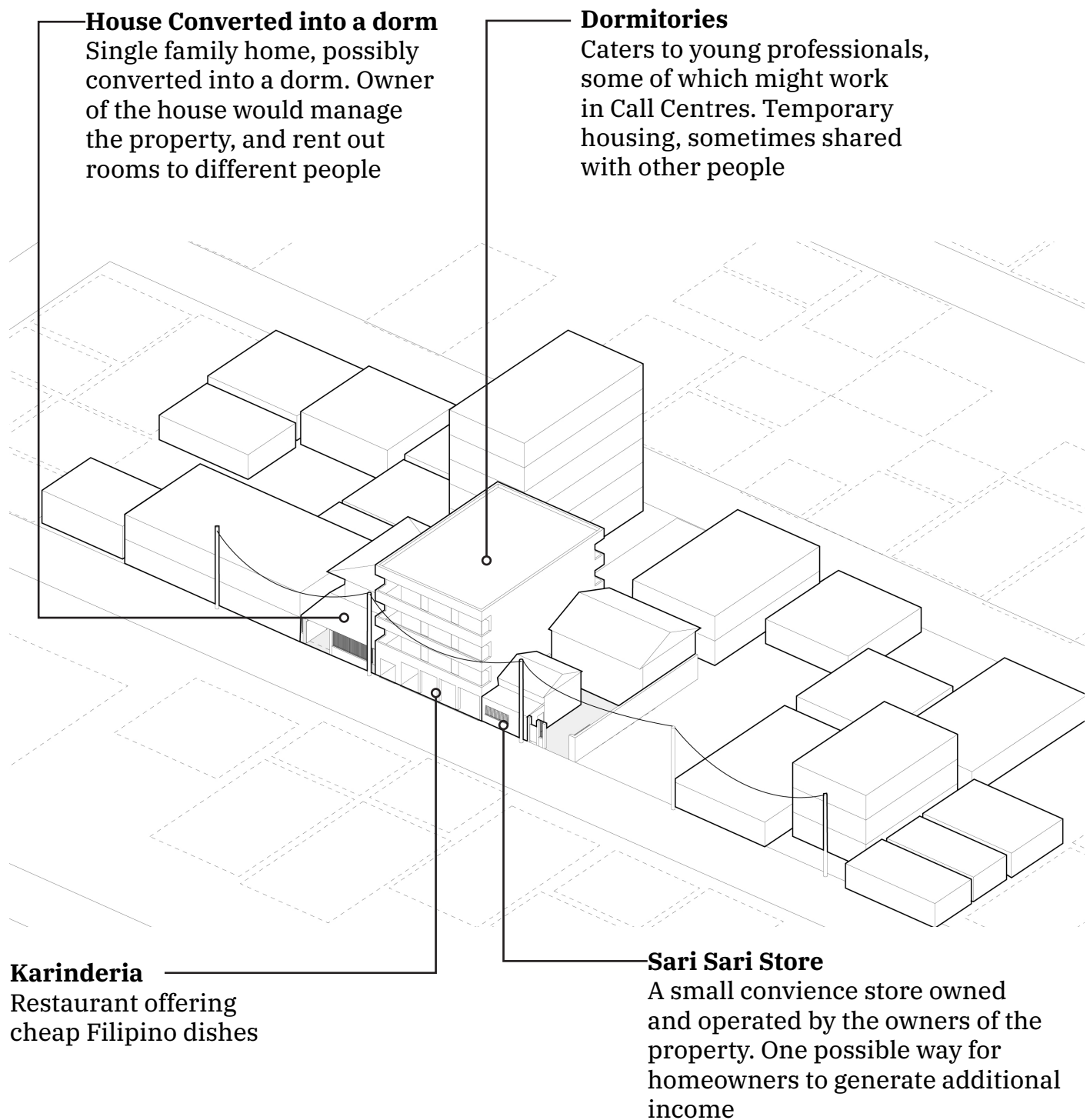


Figure 1.38: Diagram of a typical extramuros neighbourhood



Figure 1.39: The extramuros neighbourhood of Guadalupe Nuevo as seen from Bonifacio Global City



Figure 1.40: A dormitory being renovated in Cubao
Figure 1.41: A dormitory in Cubao



Figure 1.42: A bakery in Guadalupe Nuevo

Figure 1.43: Restaurant seating spills onto the street in Guadalupe Nuevo



Figure 2.0 : The main gate of Camp Aguinaldo

Part 2

2.0 Camp Aguinaldo

2.1 Masterplan

2.2 Housing

2.3 Conclusion

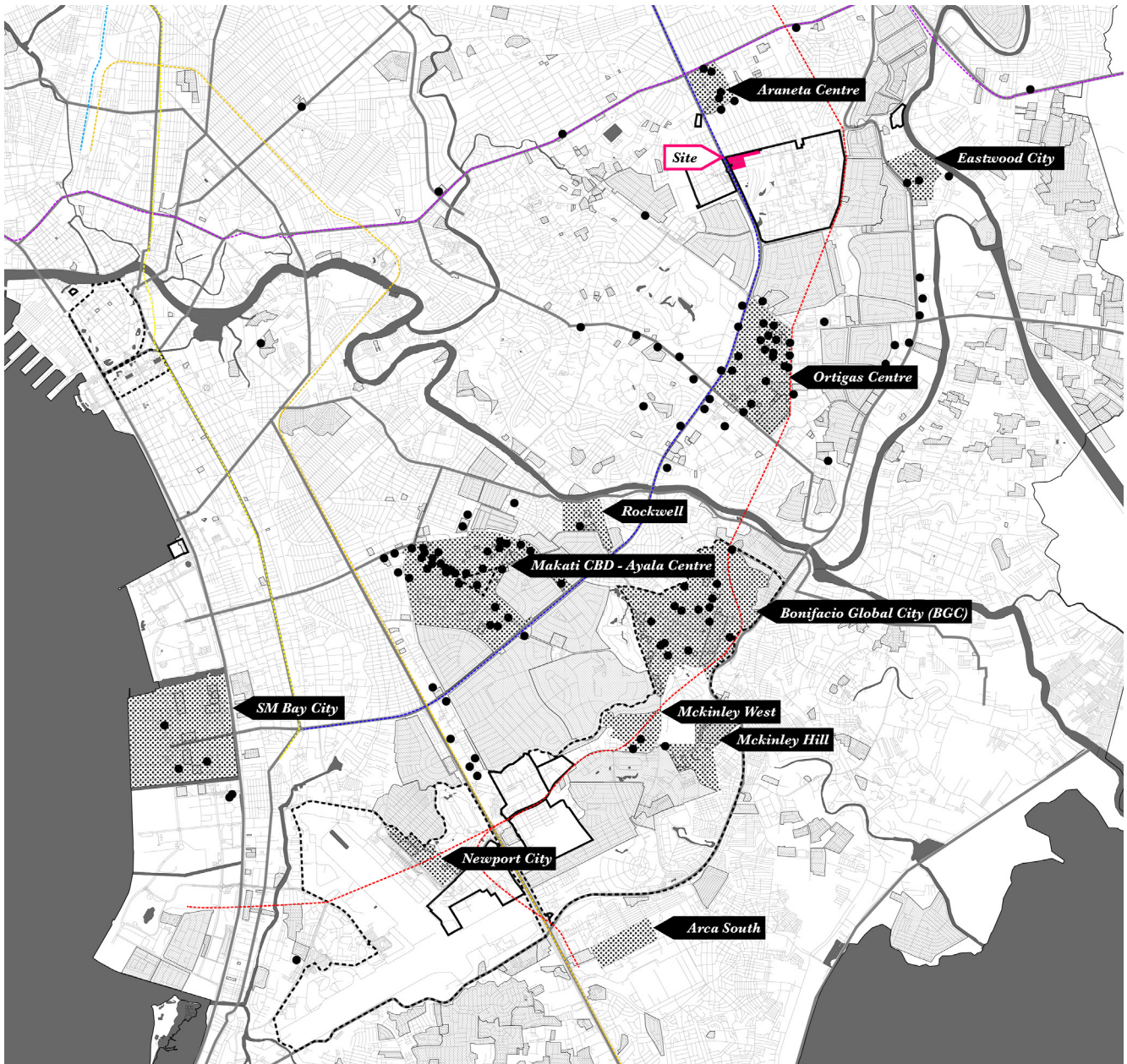


Figure 2.1: The site chosen within Camp Aguinaldo (highlighted in pink) is in close proximity to other CBDs and the circumferential highway EDSA

2.0 – Camp Aguinaldo

Camp Aguinaldo is currently the headquarters of the Armed Forces of the Philippines. While the BCDA has not officially identified Camp Aguinaldo as a site for any future commercial or mixed-used development, multiple Presidents since the early 2000s have expressed interest in selling Camp Aguinaldo to real estate developers, which in 2006 was approximately valued in its entirety at ₱53.4 billion (\$1.12 billion CAD in 2006).⁴⁵ In the year 1935, 26 hectares of the site was donated to the Philippine Government, from the hacienda owned by the Ortigas Family, for the sole purpose of establishing a American military base outside of the city of Manila named Camp Murphy.⁴⁶ By 1965, the government purchased additional lots bringing the total area of the camp to 179 hectares – at which point the Camp was then renamed Camp Aguinaldo, after President Emilio Aguinaldo.⁴⁷ This thesis recognizes that although the land is valued at a high price, there is an unprecedented opportunity for government and real estate developers to rethink and implement inclusive planning strategies, that should prioritize the development of affordable housing in Metro Manila.

Located in the municipality of Quezon City, various site conditions make the site a prime location for development. On its western border, Epifanio De Los Santos Avenue (EDSA) and Santolan Station of MRT Line 3 connect the site to other municipalities and CBDs such as Ortigas Centre and Araneta Centre. Immediately on the south and east of the site are two high-end

⁴⁵ Victor C. Agustin, “GMA, here are Your Billions,” Philippine Daily Inquirer, *sec. Business*, June 07, 2006.

⁴⁶ Norman Bordadora, “Camps Crame, Aguinaldo for Sale – Purisima,” Philippine Daily Inquirer, *January 08, 2011*.

⁴⁷ Bordadora, “Camps Crame, Aguinaldo for Sale – Purisima,”



Figure 2.2: Satellite image of Camp Aguinaldo. The site chosen is a 5.3 hectare lot located on the north-west corner of the camp.

gated residential communities of White Plains and Corinthian Gardens, which mostly consist of single-family houses. To the north is the neighbourhood of Cubao, which can be classified as an *extramuros* neighbourhood where many BPO workers live due its close proximity to the CBD of Araneta Centre. Camp Aguinaldo currently houses the AFP General Headquarters, the Department of National Defence, The National Defence College, the AFP Museum and Theatre, offices for various government agencies unrelated military operations, housing for more than 5,000 military personnel, and multiple golf courses, putting ranges, and driving ranges which are open to the public.

It is important to note that in the original deed of donation, the Ortigas Family stipulated that if the original 26 hectares of land were to be sold —which currently consists of the AFP parade grounds, AFP headquarters, and AFP Museum and Theatre — ownership of that parcel would immediately return to the Ortigas Family. For the purposes of this thesis, the parcel chosen for intervention is located within areas that are fully owned by the Philippine government, which have no known restrictions or limitations in development. The final site chosen are two putting ranges located on the northwestern edge of the site, when consolidated would total an area of 5.3 hectares.



Figure 2.3: Site context photos facing the walls of Camp Aguinaldo along Col. Bonny Serrano Ave



Figure 2.4: Site context photos facing the neighbourhood of Cubao along Col. Bonny Serrano Ave



Figure 2.5: Karindaria in Cubao

Figure 2.6: Sari-Sari store in Cubao



Figure 2.7: Single family homes and low-rise apartment buildings in Cubao

Figure 2.8: Tricycles waiting for passengers in Cubao

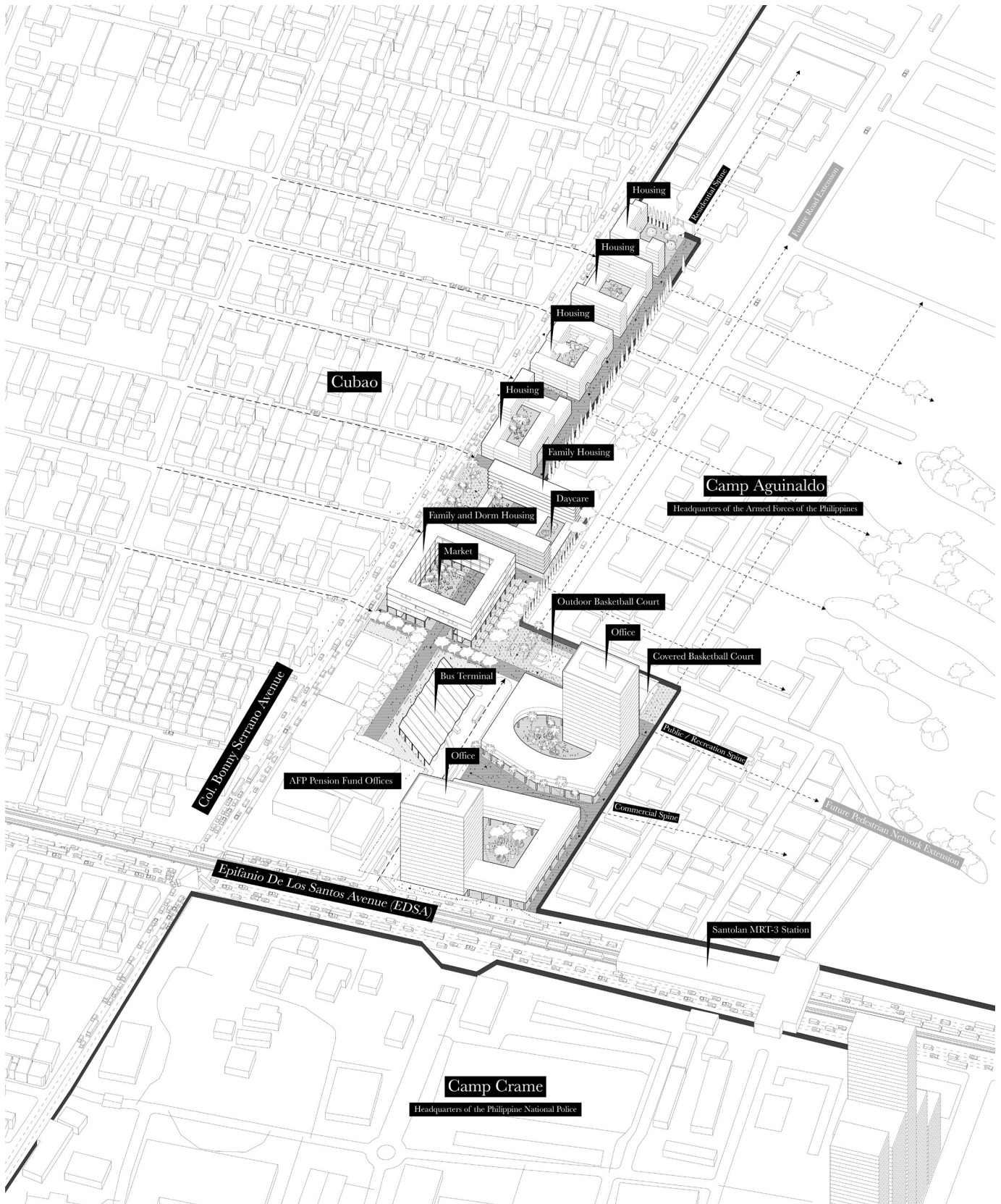


Figure 2.9: Axonometric of the Masterplan

2.1 - Masterplan

The main objective for the masterplan is to develop a strategy that prioritises affordable housing, creates seamless urban connections to the neighbourhood of Cubao, and mediate between the different economic interests of both private and public stakeholders by designating areas for commercial and residential development. To achieve this, a smaller parcel of the Camp was chosen for the intervention, as opposed to adhering to the established practice of allowing one real estate developer full ownership and control of a large swath of raw land. Developing the site incrementally would allow future developments to carefully consider the immediate context and respond to the changing needs of the commercial and housing real estate market. Therefore, this thesis proposes a gradual opening of what was once the military camp, into new public grounds – slowly erasing the boundaries of the *intramuros* and creating seamless connections to the *extramuros*.

Furthermore, street level programming of the site is supported by data from a survey conducted by Colliers International on what amenities BPO workers look for when finding housing – such as markets, transit terminals, retail outlets, and recreational facilities.⁴⁸ Similar social programming strategies are used in Singapore’s Housing Development blocks as outlined in Eric Kleinberg’s *Palaces for the People*, such as “busy food corridors, commercial strips with local vendors, neighbourhood parks, and vibrant public spaces”, which are places where neighbours meet, eat, and shop.⁴⁹ In Manila, it is important to consider alternative

⁴⁸ Julius Guevara, Deterining the Housing Demands of BPO Workers (Manila, Philippines: Colliers International Philippines, [2016]).

⁴⁹ Eric Klinenberg, Palaces for the People: How Social Infrastructure can Help Fight Inequality, Polarization, and the Decline of Civic Life (New York: Crown, 2018).

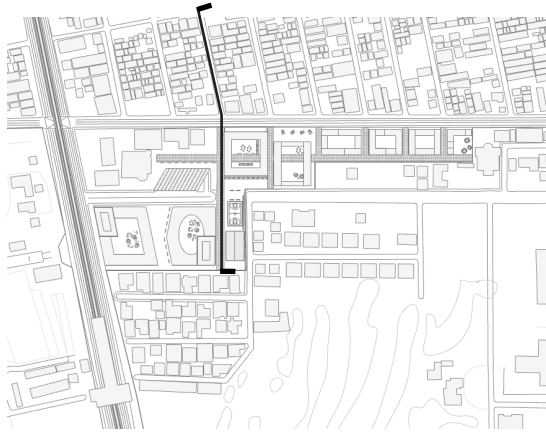
forms of street side interaction, which in CBDs are primarily high-end retail, restaurants, bars, and various outlets that are out of reach for many BPO workers. Therefore, the masterplan takes elements from the *extramuros*, and deploys these lessons throughout the site.

Within the site, a series of community functions located at grade line two main pedestrian spines straddling the new walls of the Camp, which serve as the main mode of circulation throughout the site. These pedestrian spines are not only zoned for commercial and retail uses, but instead balance the need for social infrastructures and spaces for gathering throughout the site. The main north-south pedestrian spine — an extension of 7th Avenue — serves as the public and reactional spine of the site, due the location of the market, basketball courts, and the at grade public spaces of proposed commercial office buildings. Along the southern wall of the camp, the main east-west pedestrian spine connects multiple housing blocks together. The existing street grid of Cubao, is extended towards the northern portion of the site, allowing for a seamless connection into the neighbourhood. Further extending these pedestrian paths would serve as a framework for expansion, if future development were to occur in Camp Aguinaldo

In order to take advantage of increased pedestrian mobility, buildings within the site allow for various degrees of porosity, depending on their intended program. For instance, commercial and public buildings, are lifted up by piloti at grade, to allow for the free movement of people, as well as the possible expansion of programs such as the market — which can spill over to pedestrian paths and other open spaces. While in residential buildings, openings at various points, allow for controlled access

between courtyards and pedestrian paths. At grade, karinderias, shops, and daycares activate both the courtyard and pedestrian sides of each residential building. Each building on the site has a courtyard which frames various public spaces throughout the site. These public spaces host community functions such as the market, daycare, gardens, and basketball courts. Residential buildings, which are mostly located on the eastern side of the site, take advantage of single loaded corridors which allows for cross ventilation within units. Buildings are 6-8 stories in height, allowing as much daylight as possible into the courtyard, while achieving a reasonable level of density. Commercial buildings are located on the western edge of the site, adjacent to EDSA and the Santolan MRT station, connecting the site to other parts of Metro Manila.

The masterplan rethinks the current planning strategies of converted military bases in the Philippines. Prioritizing the development of affordable housing is a driver for development of the site, where both government and private stakeholders should find ways to balance their needs in order to provide housing for BPO workers. Public open spaces, courtyard spaces, and green spaces, allow for recreational activities and other community functions to take place, serving as social infrastructure that brings people together. These new community functions and public spaces become community connections for the existing neighbourhood of Cubao. While the first phase of the masterplan starts with a smaller parcel, establishing a framework for future incremental development, through the extension of the street grid of Cubao, and the designation of pedestrian and vehicular streets, will let developers consider the immediate context and respond to the changes to the needs of the commercial and real estate market.



Cubao

*Col. Bonny
Serranno Ave*

Figure 2.10: Section through 8th Ave Pedestrian Spine



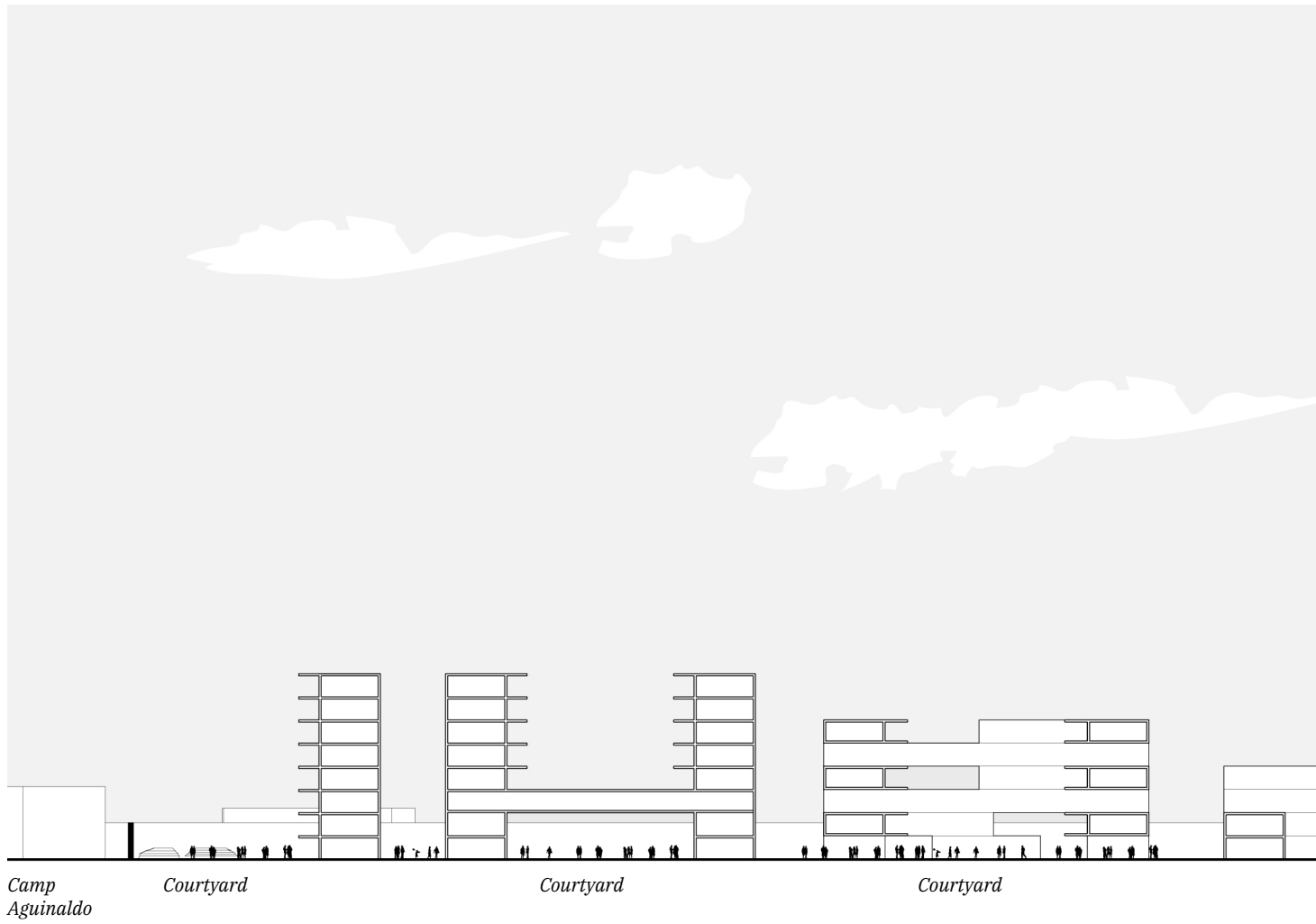
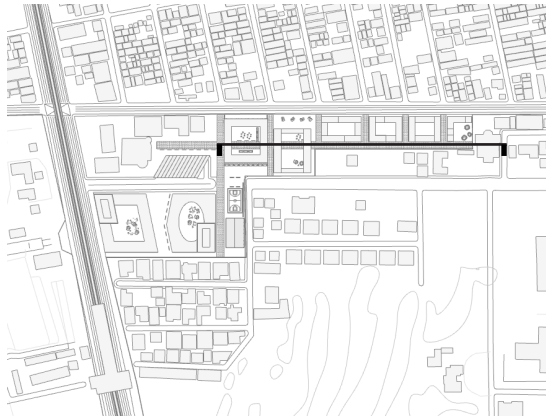
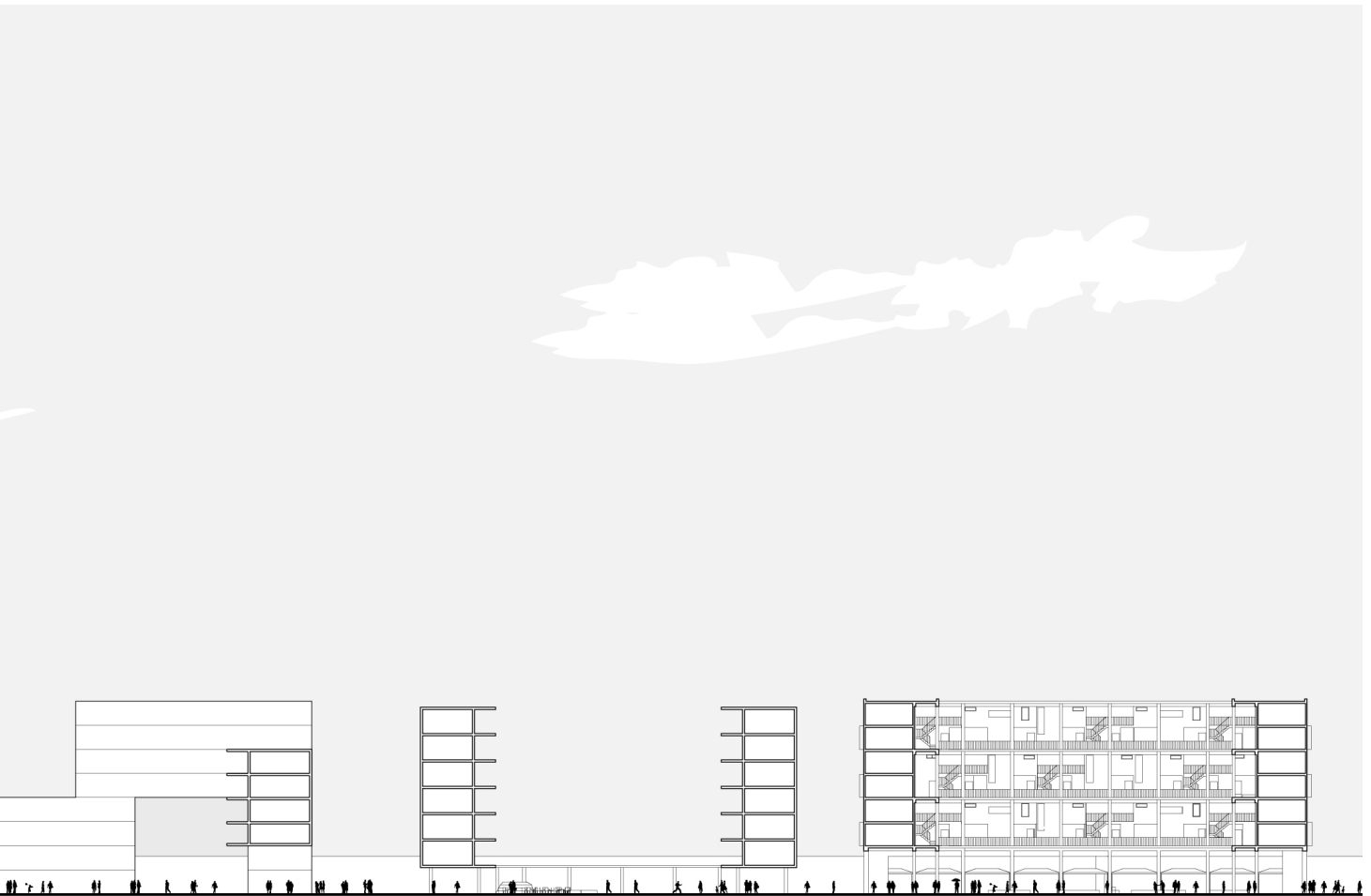


Figure 2.11: Section Residential Pedestrian Spine



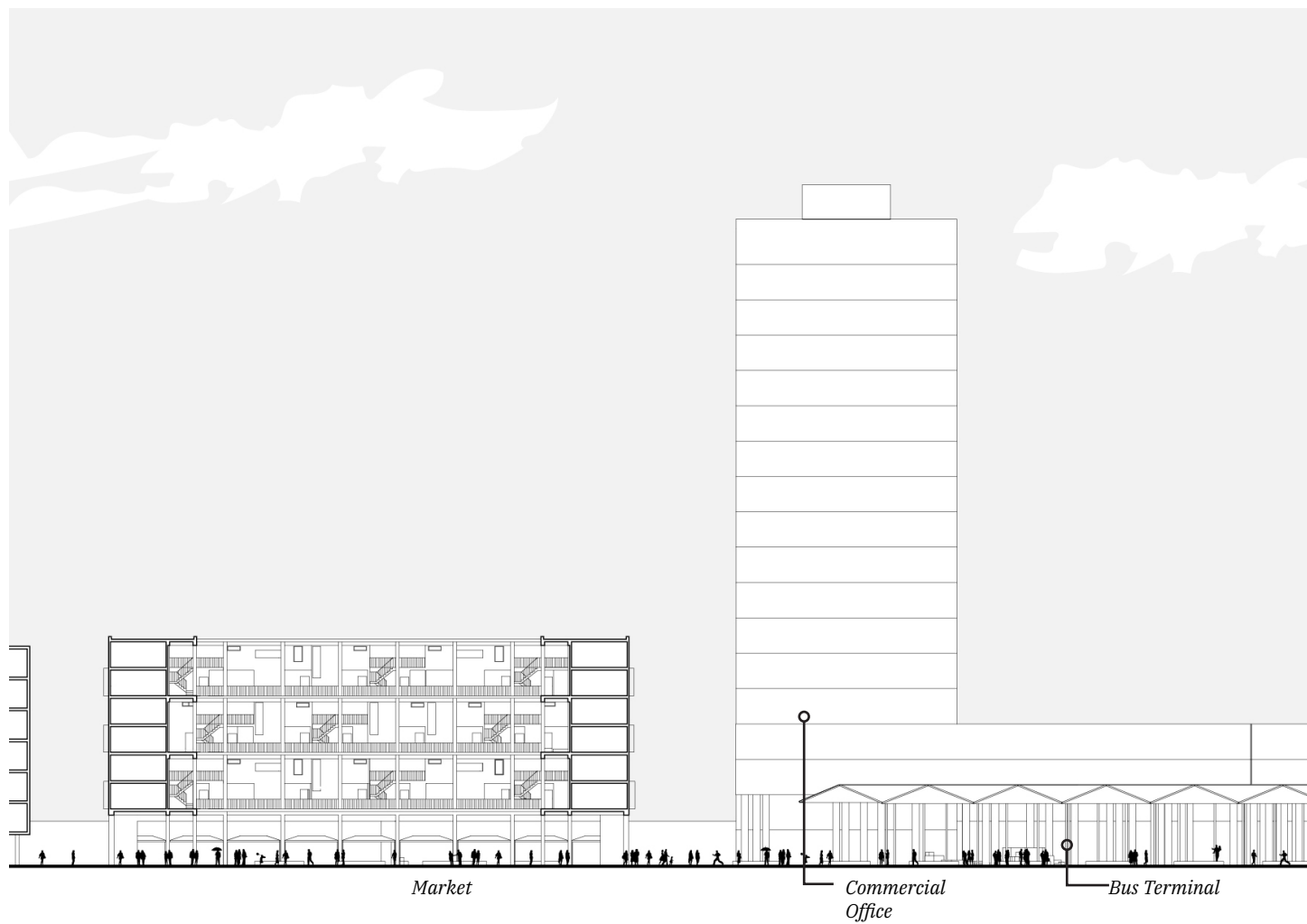
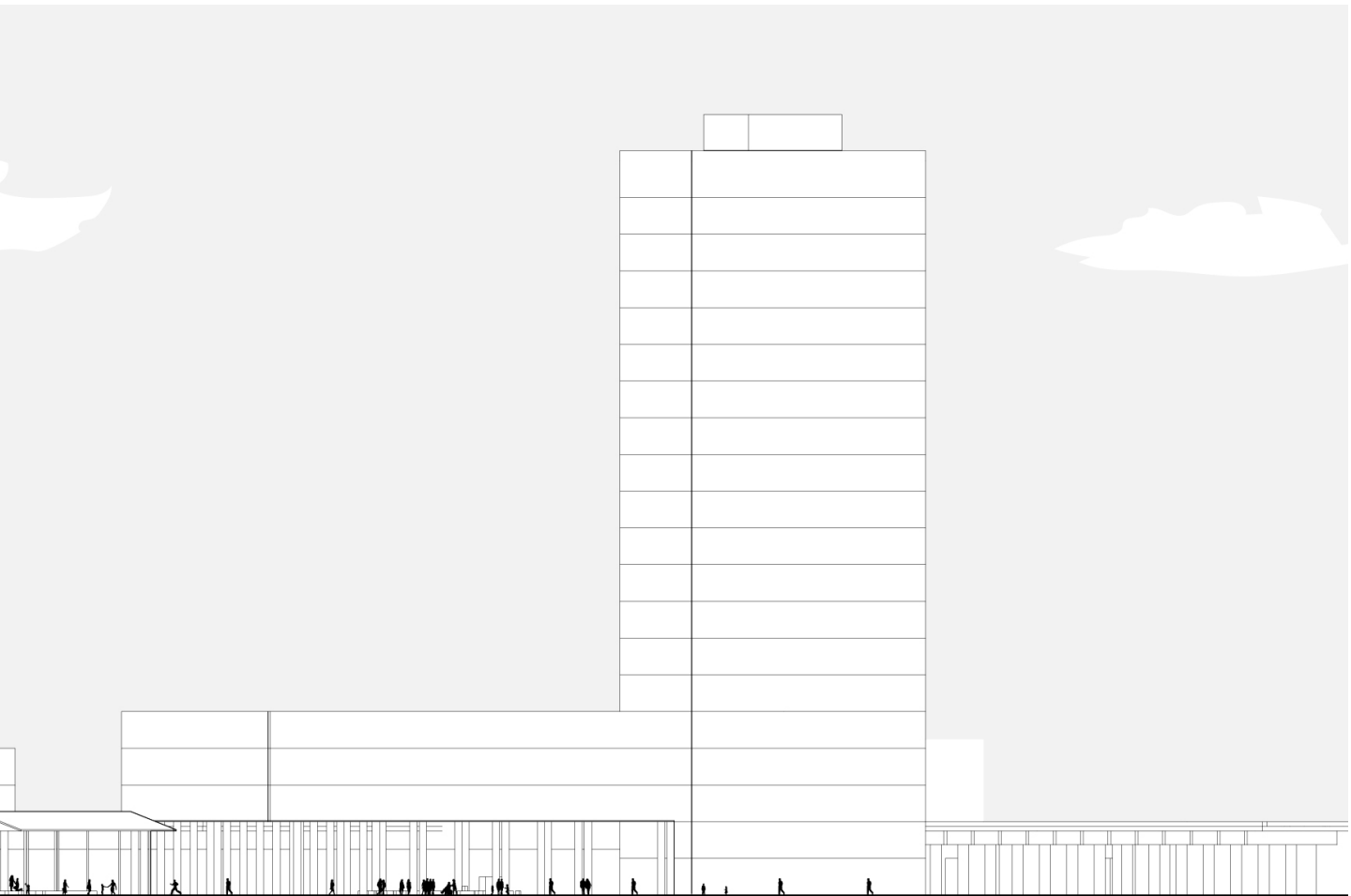


Figure 2.12: Section Residential Pedestrian Spine



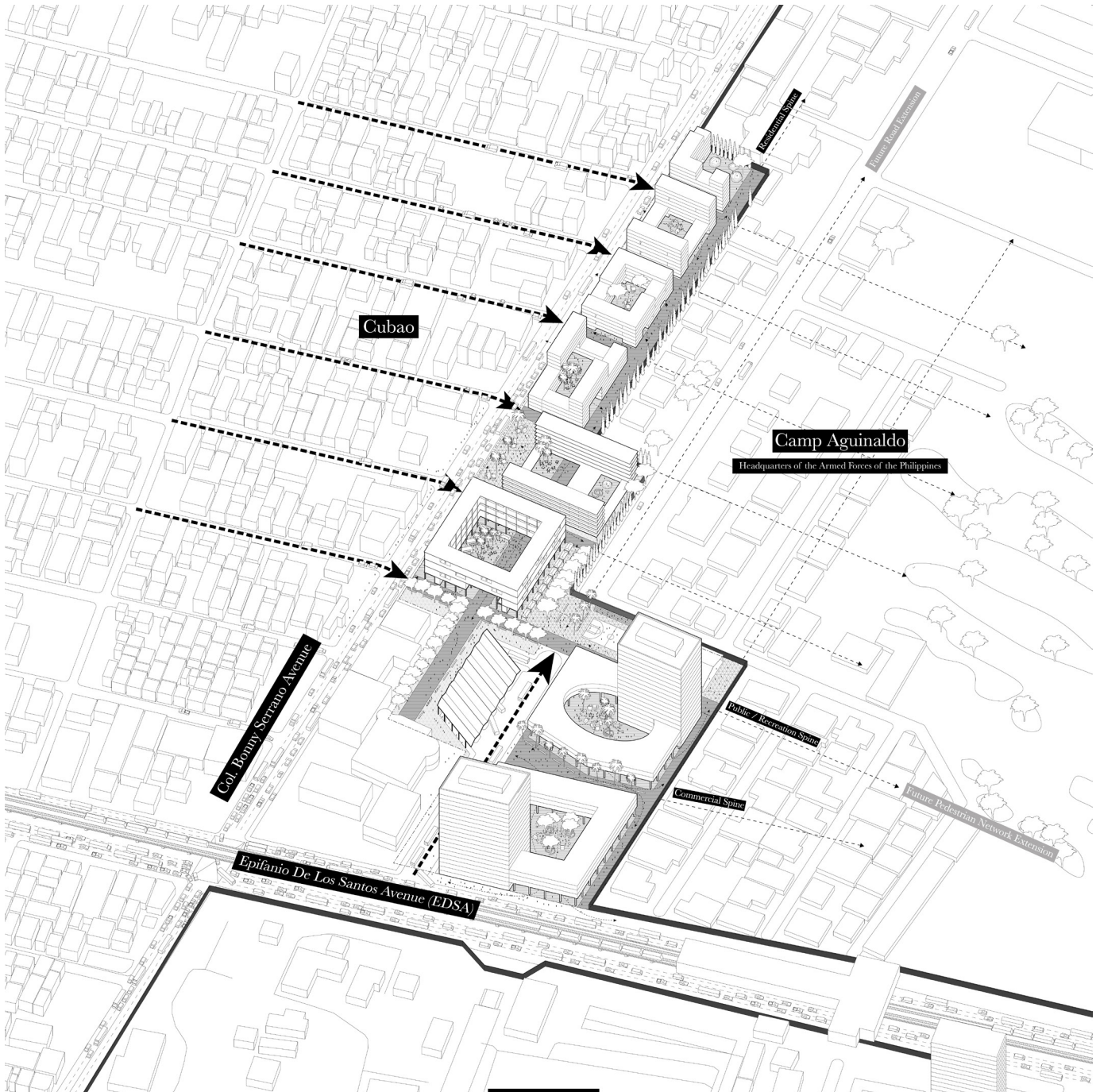


Figure 2.13: Extending the street grid of Cubao into the site

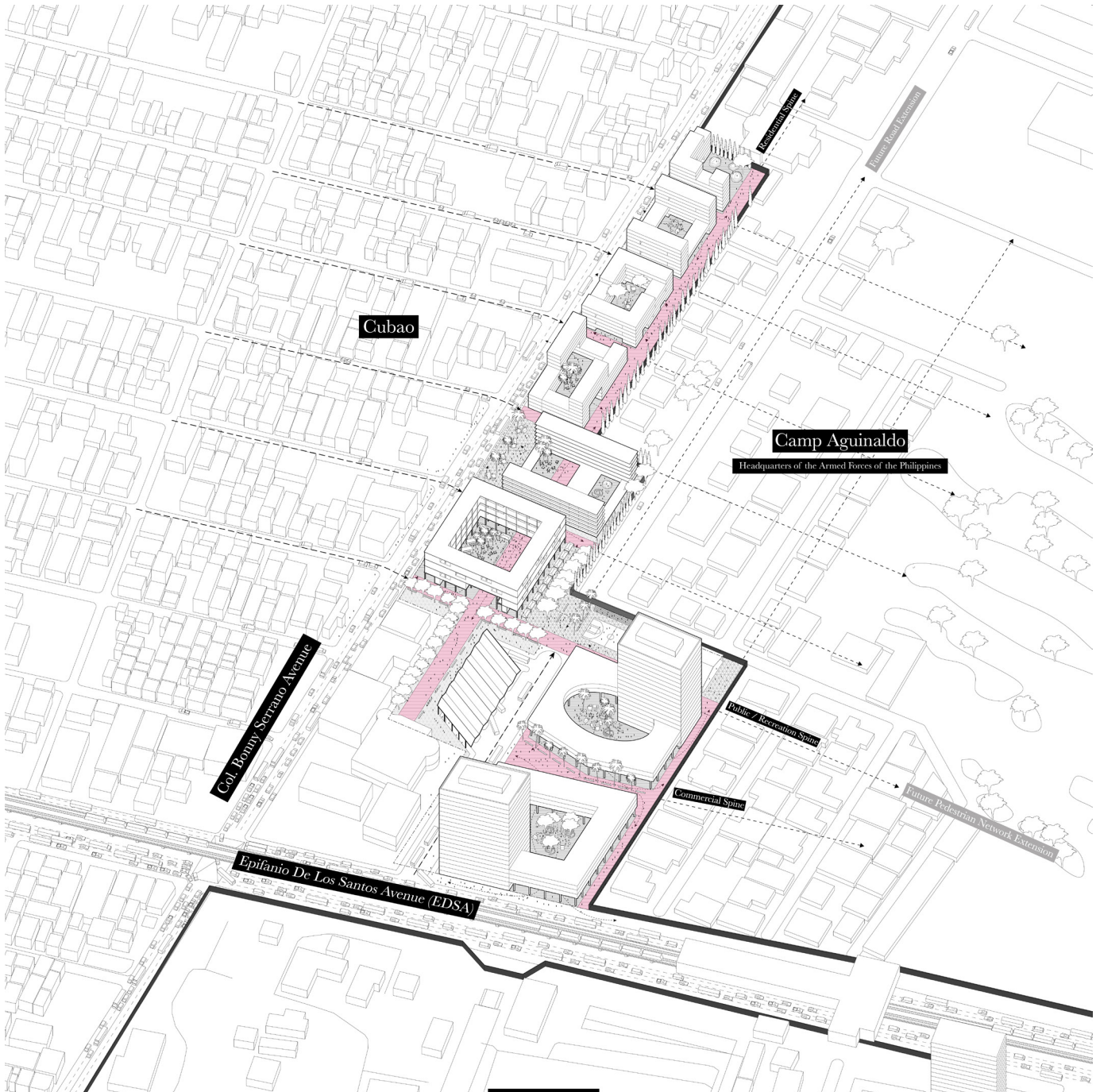


Figure 2.14: Main pedestrian spines which connect the residential area on the east, to the commercial areas to the west

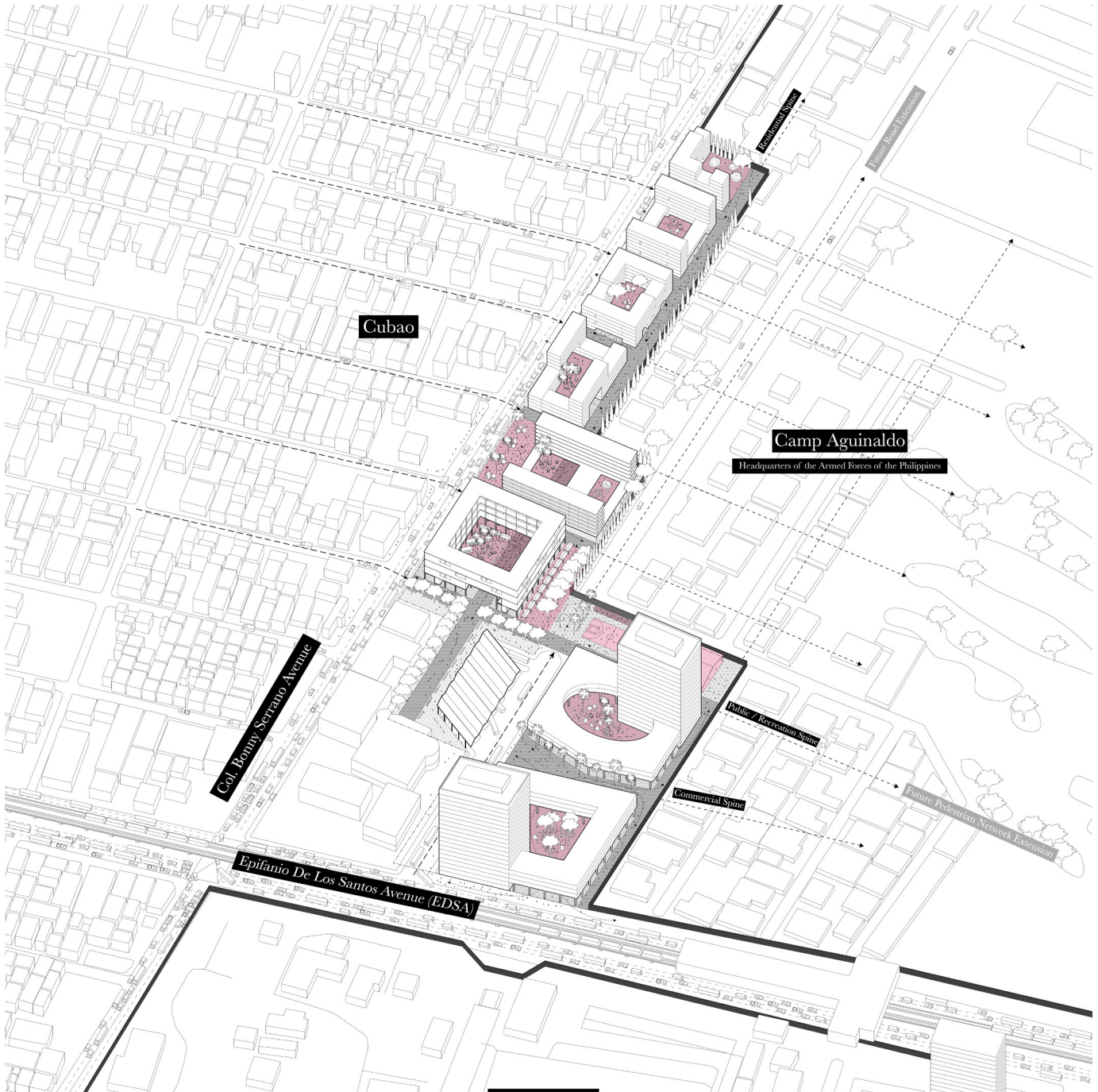


Figure 2.15: Courtyard spaces which host the market, indoor and outdoor basketball courts, gardens, and daycare.

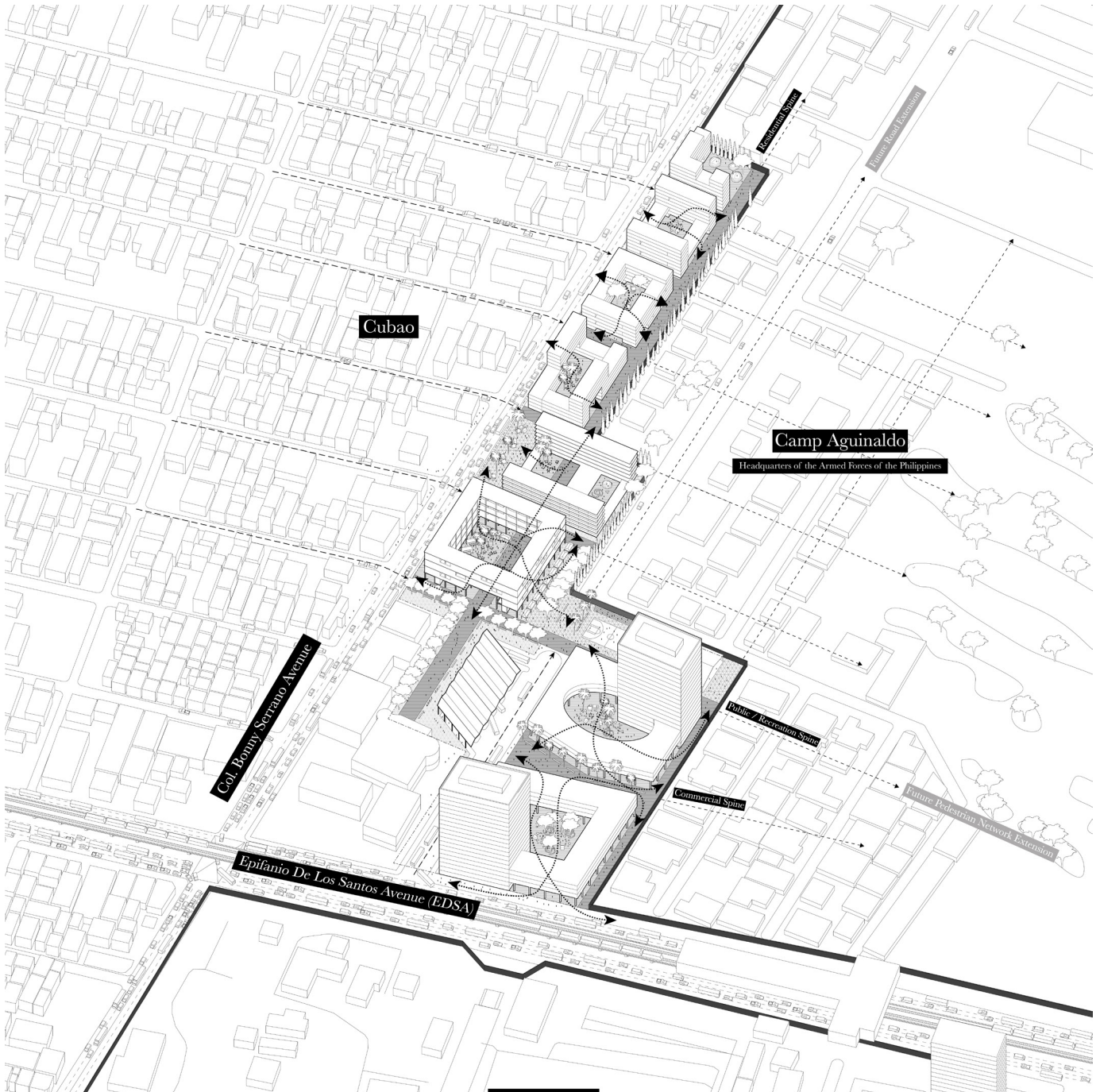


Figure 2.16: Buildings lifted by piloti, and openings at various points at grade within buildings allow for people to move freely throughout the site, and allow community programs to spill beyond the courtyards



Figure 2.17: Residential buildings are located on the east side of the site, with commercial and transport buildings located on the west side, close to EDSA

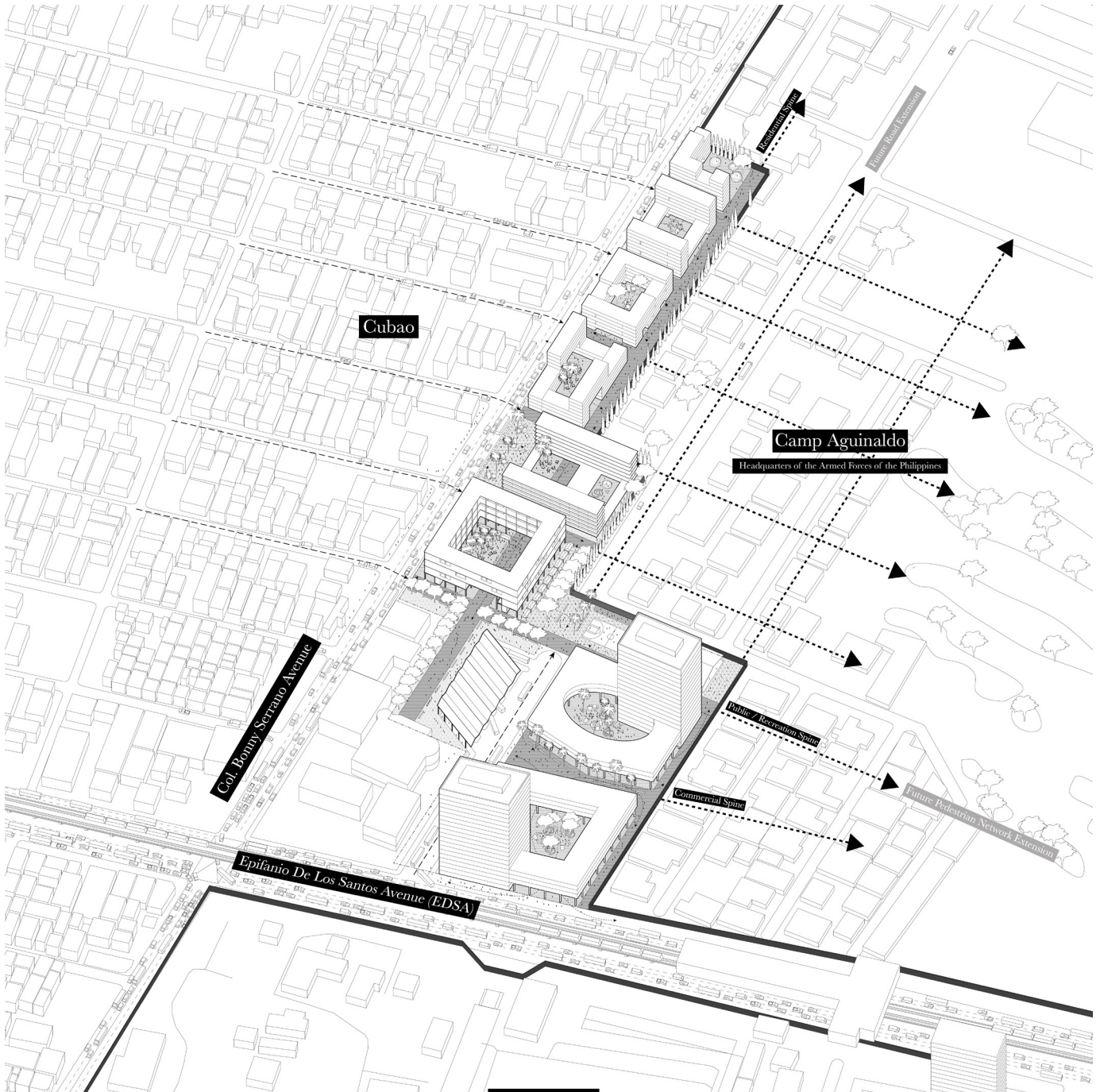


Figure 2.18: The street grid can then be extended into Camp Aguinaldo for when the site can expand into a larger development



Figure 2.19: View from the basketball court towards the housing block.

2.2 - Housing

For this thesis' final phase, one housing building was selected for further design development. The intent of the design was to respond to the lack of available family housing in affordable developments, such as *Avida* and *Amaia*, and to allow for BPO workers who live in dorms to be incorporated into a larger community.

Precedents such as the Gifu Kitagata Apartments by Kazuyo Sejima of SANAA, and Elemental's Villa Verde Housing project, informed the design of this final phase. In the Gifu Kitagata Apartments, various occupancy types and sizes were accommodated by employing a modular approach to the sizes of apartments. While each apartment came with the standard rooms — such as the kitchen, bathroom, living room, exterior courtyards — additional bedrooms were added to allow small or larger families to be housed.⁵⁰ Taking advantage of a single loaded corridor, each apartment allows for cross ventilation and light to penetrate both sides of each apartment. In the Villa Verde Housing, Elemental approached this social housing project by designing and building “half of a good house”, providing an open space adjacent to each house for which the resident could then expand their dwelling in the future. Elemental supported residents by providing building workshops and a manual which outlined ways in which dwellings could expand.⁵¹ While these two projects were designed in different contexts and for different demographics, certain spatial strategies from each project informed the final design.

⁵⁰ Chen Farkas, Netta Gaash, “Gifu Kitagata Apartment Building – Sejima Wing, Japan,” last modified November 25, 2007, accessed April 14, 2020, <http://gifuprefecture.blogspot.com>

⁵¹ Sam Greenspan, “Half A House,” 99% Invisible, last modified November 10, 2016, accessed April 14, 2020, <https://99percentinvisible.org/episode/half-a-house>



Figure 2.20: View of single loaded corridors at the Gifu Kitagata Apartments

Figure 2.21: Gifu Kitagata Apartments by Kazuyo Sejima





Figure 2.22: Villa Verde Housing Project by Elemental

Figure 2.23: The empty half of the house is being filled in to expand the size of the dwelling

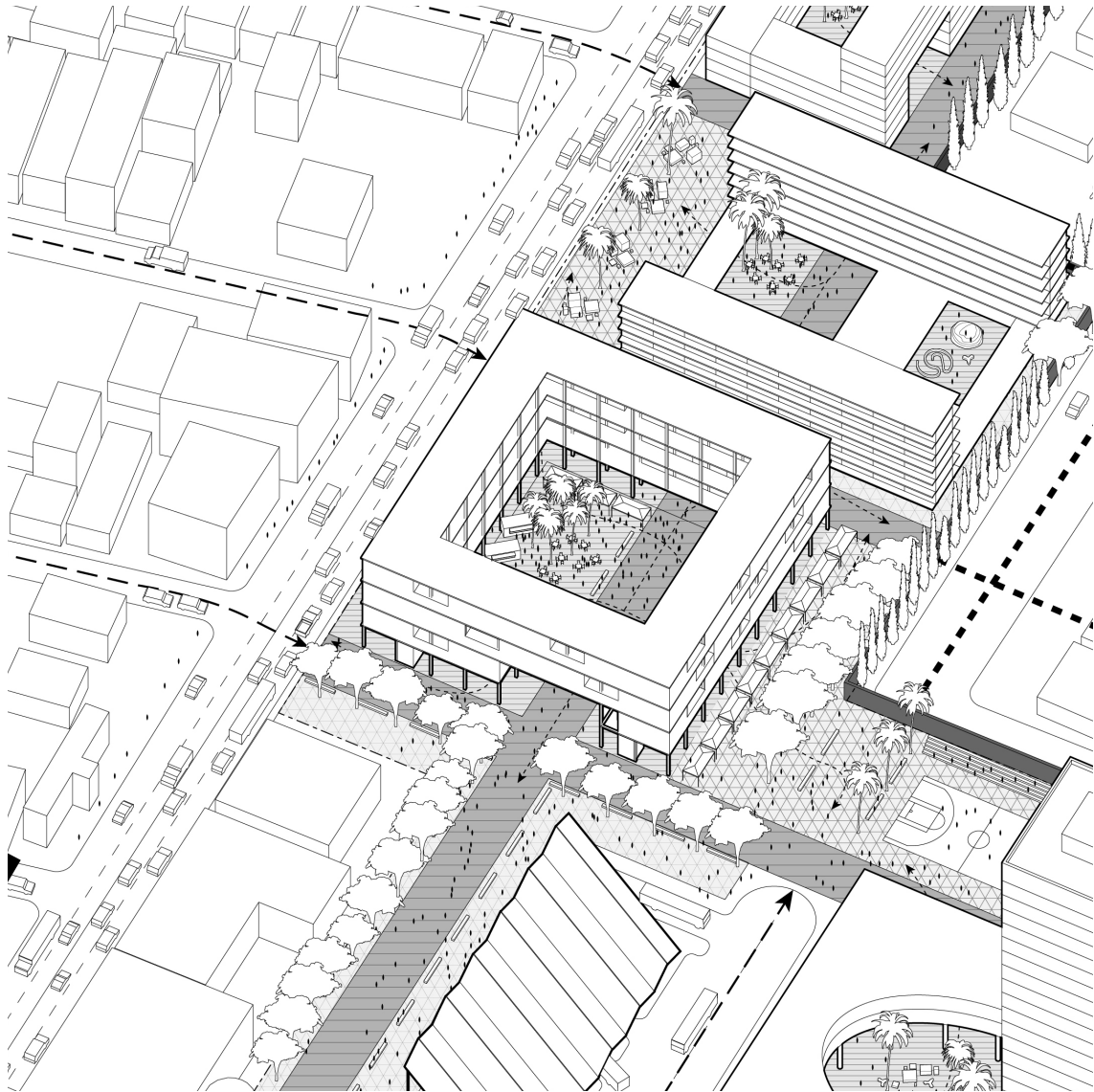


Figure 2.24: Axonometric of selected building

The building houses a community of young BPO workers and families and intends to bring people from the within the site and the neighbourhood of Cubao together. At street level, the Market is a space for the public to eat and shop, underneath the open-air courtyard and the arcades surrounding the perimeter of the building. Above the market are the residential units, which house both dormitories for BPO workers and for families of different sizes. A single-loaded exterior corridor wraps the courtyard, allowing for views of the market from the residential floors. The corridors are wide enough to allow for neighbours to set up outdoor furniture, laundry to dry, and planters outside of their own apartments. These outdoor spaces encourage residents to foster relationships with their neighbours whether they are the younger BPO workers living in the dorm, or other families.

Guided by a structural module of 6.5m x 6.5m, the size of an apartment is based on the number of rooms required, which are at least 6.5m x 3.25m in size. Apartments and dormitories are organized to ensure that at least one dormitory is adjacent to a family unit, promoting social interaction between different occupant types within the building.

Apartments are two stories, with common spaces, such as the living room, dining room, and kitchen located on the ground floor, and bedrooms and bathrooms located on the second floor. These apartments are designated for families or for multiple occupants. Type-A units house 2 to 3 people (2 bedrooms), while Type-B units house 3 to 4 people (3 bedrooms). Certain rooms, such as the living room and bedrooms, are interior spaces that can be conditioned, whereas the kitchen and corridors are exterior spaces allowing for cross ventilation — by the use of breezeblocks, screens, and double height spaces — throughout the apartment.



Figure 2.25: View along Col. Bonny Serrano Ave





Figure 2.26: View of Exterior Corridor





Figure 2.27: Interior view of the dining room in a corner Type B apartment

As for Dormitories, basic amenities such as a closet, kitchenette and washroom are provided, and can house either 2 to 3 occupants each. The bedroom areas of the dormitory have movable partitions, allowing for privacy as well as the ability to expand interior space if needed. Above the dormitory is an exterior courtyard, which in the interim serve as exterior space for dorm occupants, which can also be shared with neighbours. In the future, dorm occupants could choose to purchase their unit, and appropriate the courtyard turning it into an apartment for a family or for multiple occupants. This would allow occupants to stay in the building, once they are able to save enough money to expand their unit.

By housing different occupant types, residents are encouraged to interact with their neighbour within the exterior corridor and courtyards within the building. These kinds of interactions are common within *extramuros* neighbourhoods in Manila, since streets are the primary public and social space for residents. Since BPO workers may experience some form of social isolation, due to their shifted schedule working primarily at night, fostering relationships with their neighbours is important in creating a community within the building.



Figure 2.28: Section perspective. The market on the ground floor can expand into adjacent empty spaces beyond the building's footprint







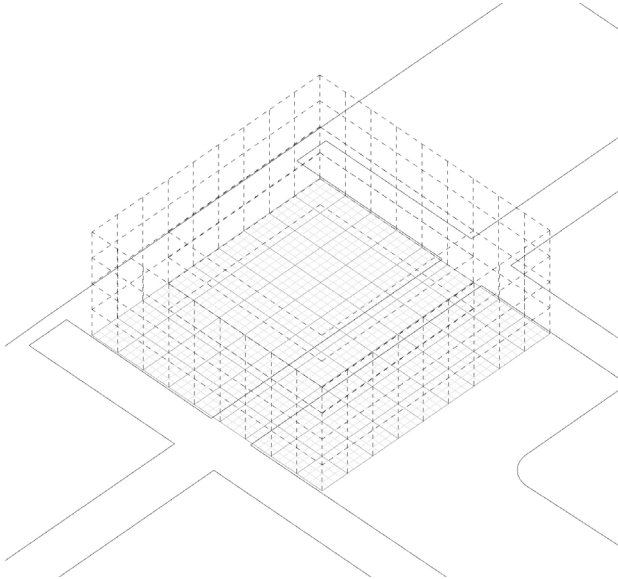
Figure 2.29: Close up of section perspective. Kitchen and dining rooms inside apartments are double height and are open to the exterior in order to take advantage of cross ventilation.

Figure 2.30: Close up of section perspective. Exterior courtyards above the dormitories are meant to be shared between occupants of the dorms, as well as occupants of the family units. In the future, dorm occupants could expand their dwelling by appropriating the courtyard.

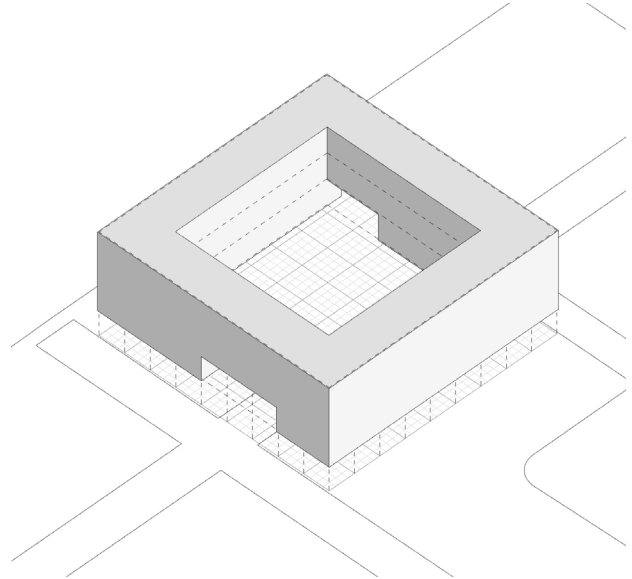




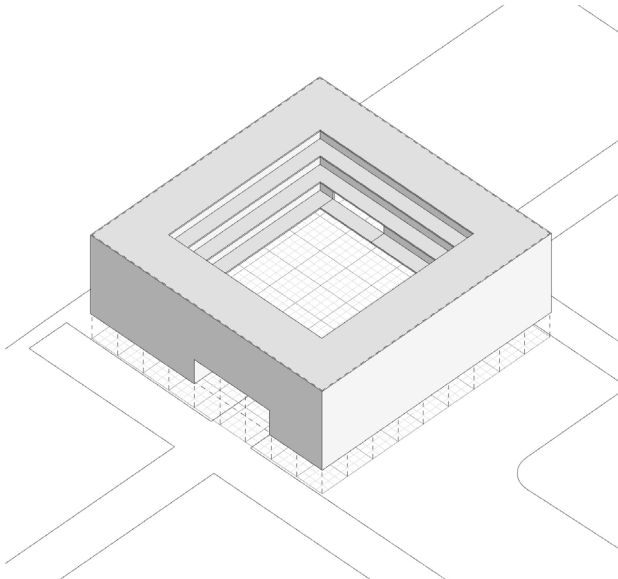
Figure 2.31: Diagrams



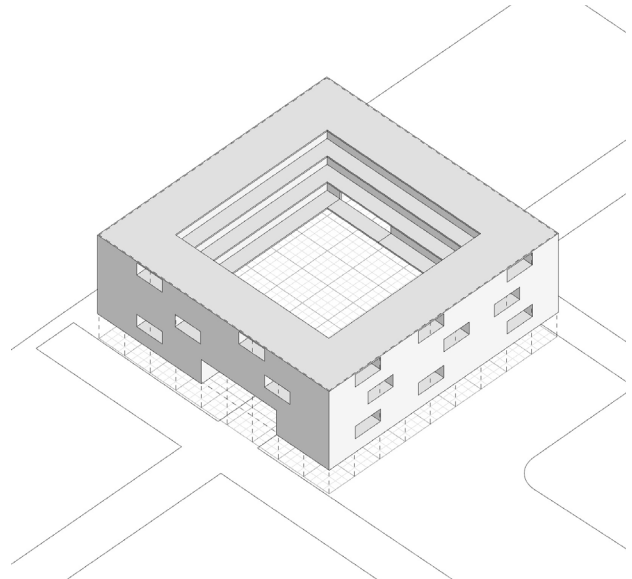
6.5m x 6.5m structural module



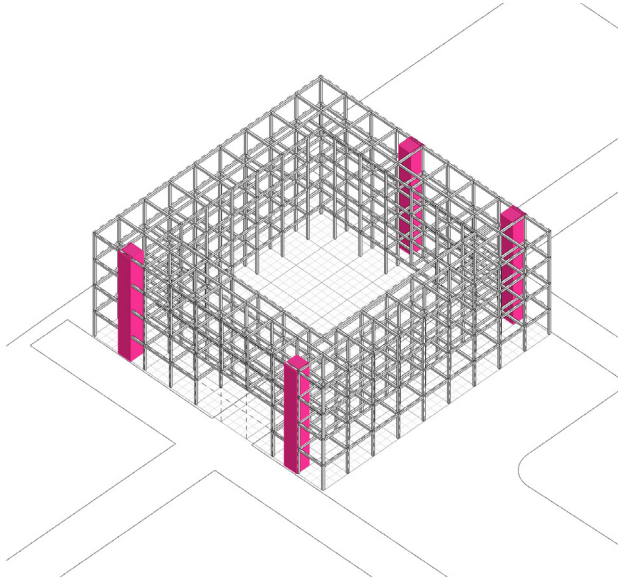
6.5m x 6.5m structural module



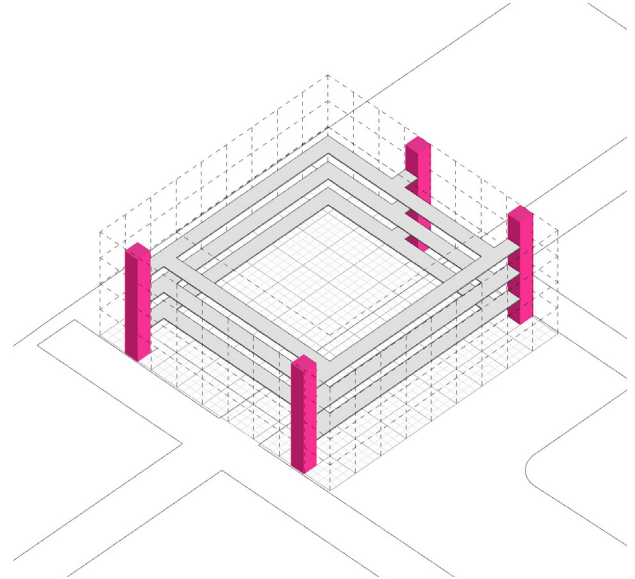
Single loaded corridors



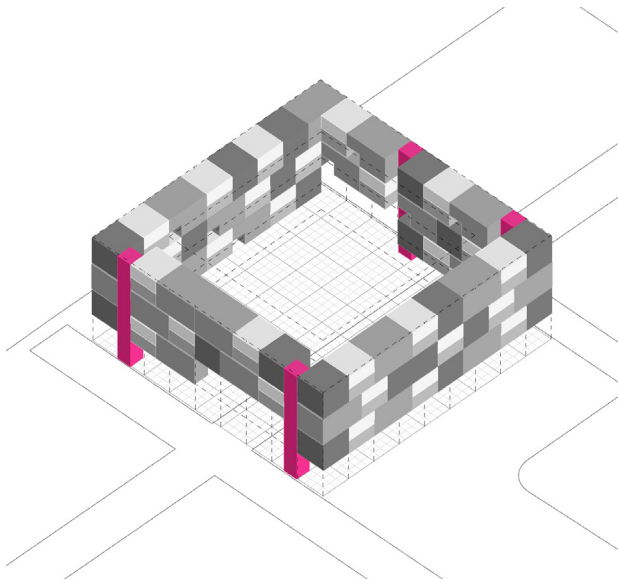
Exterior courtyards above the dorms



Structure



Circulation



Unit matrix

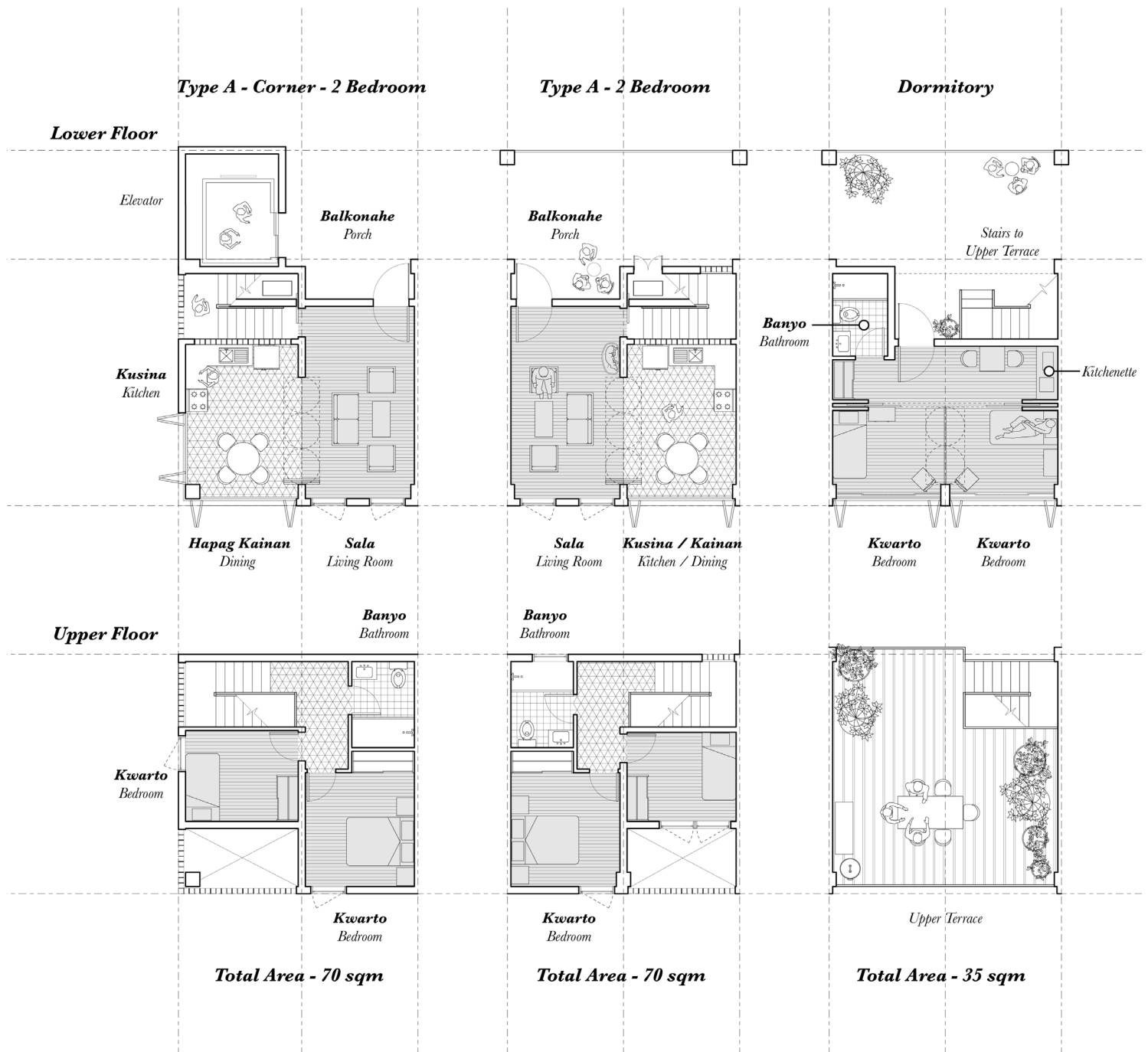


Figure 2.32: Apartment floor plans

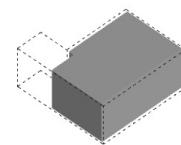
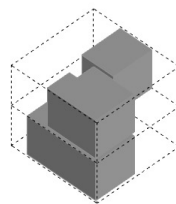
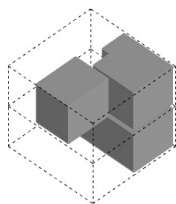
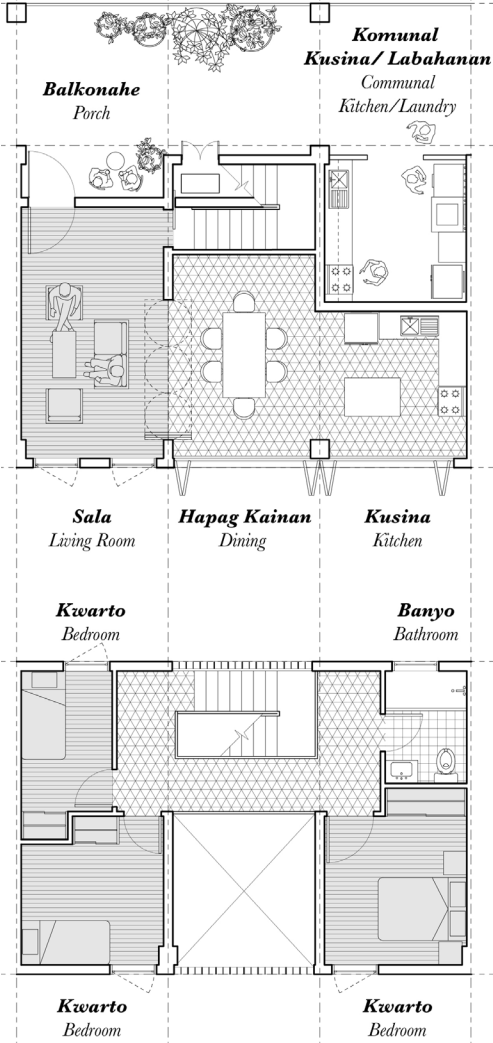
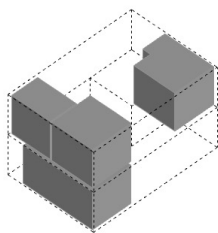


Figure 2.33: Diagram of conditioned and unconditioned spaces within apartments

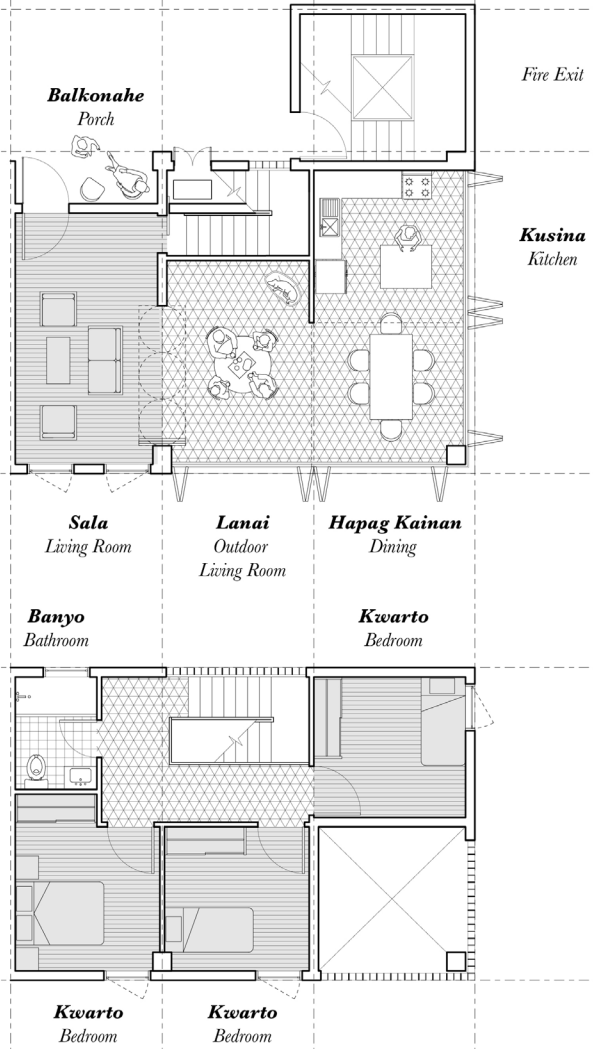
Type B - 3 Bedroom



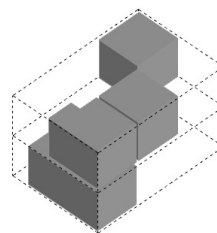
Total Area - 95 sqm



Type B - Corner - 3 Bedroom



Total Area - 105 sqm



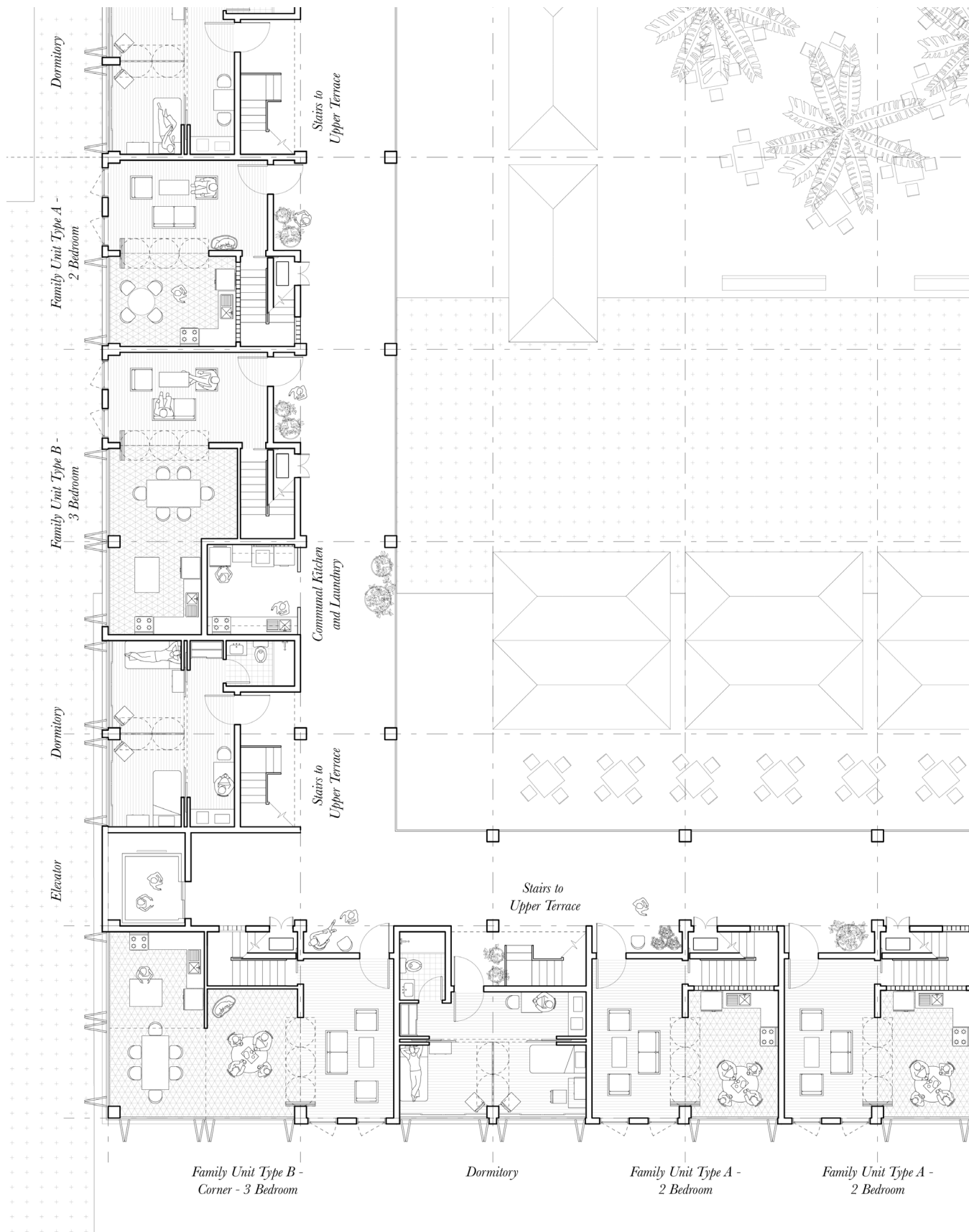
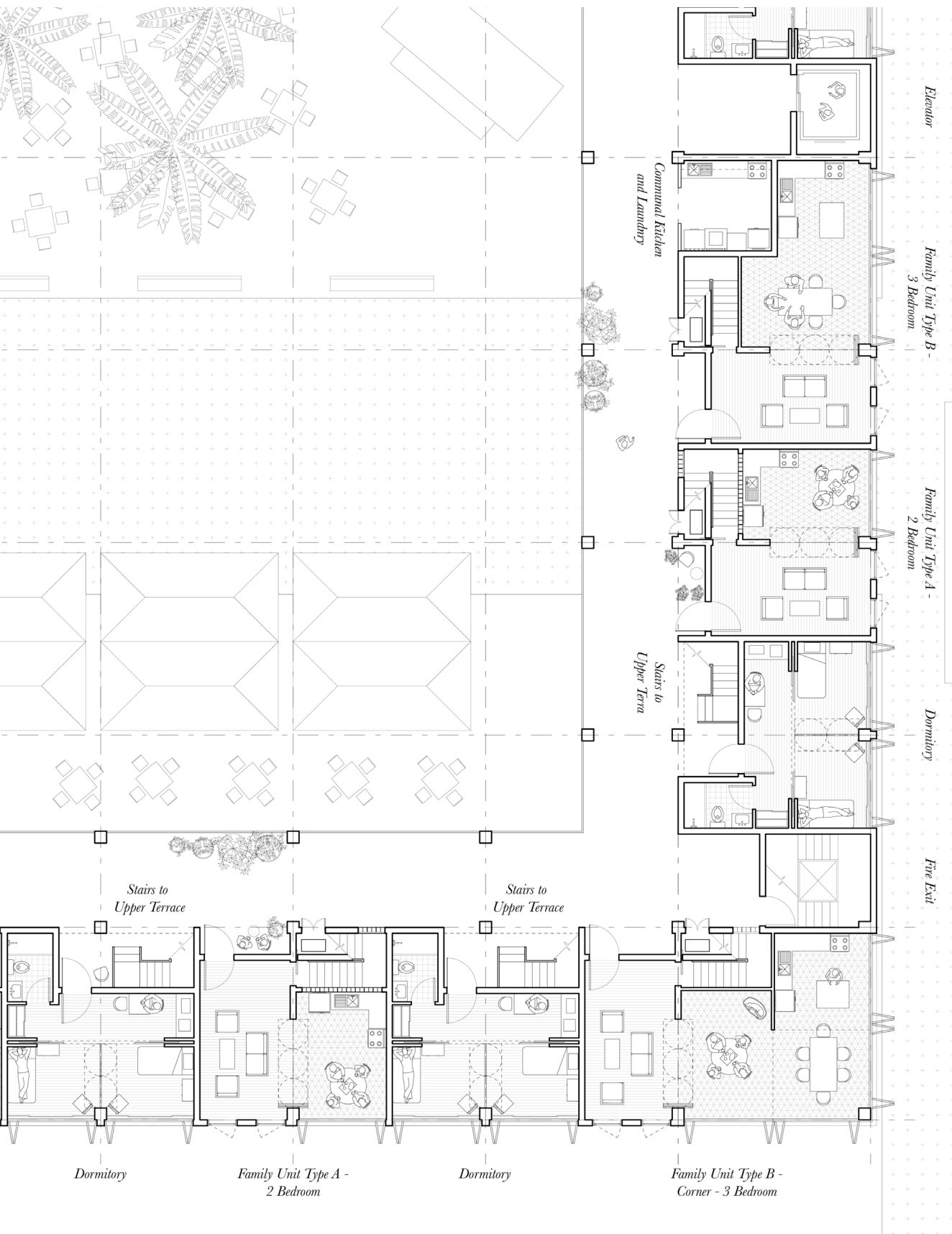
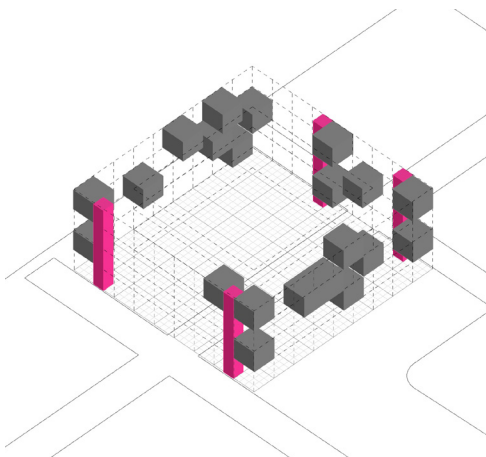
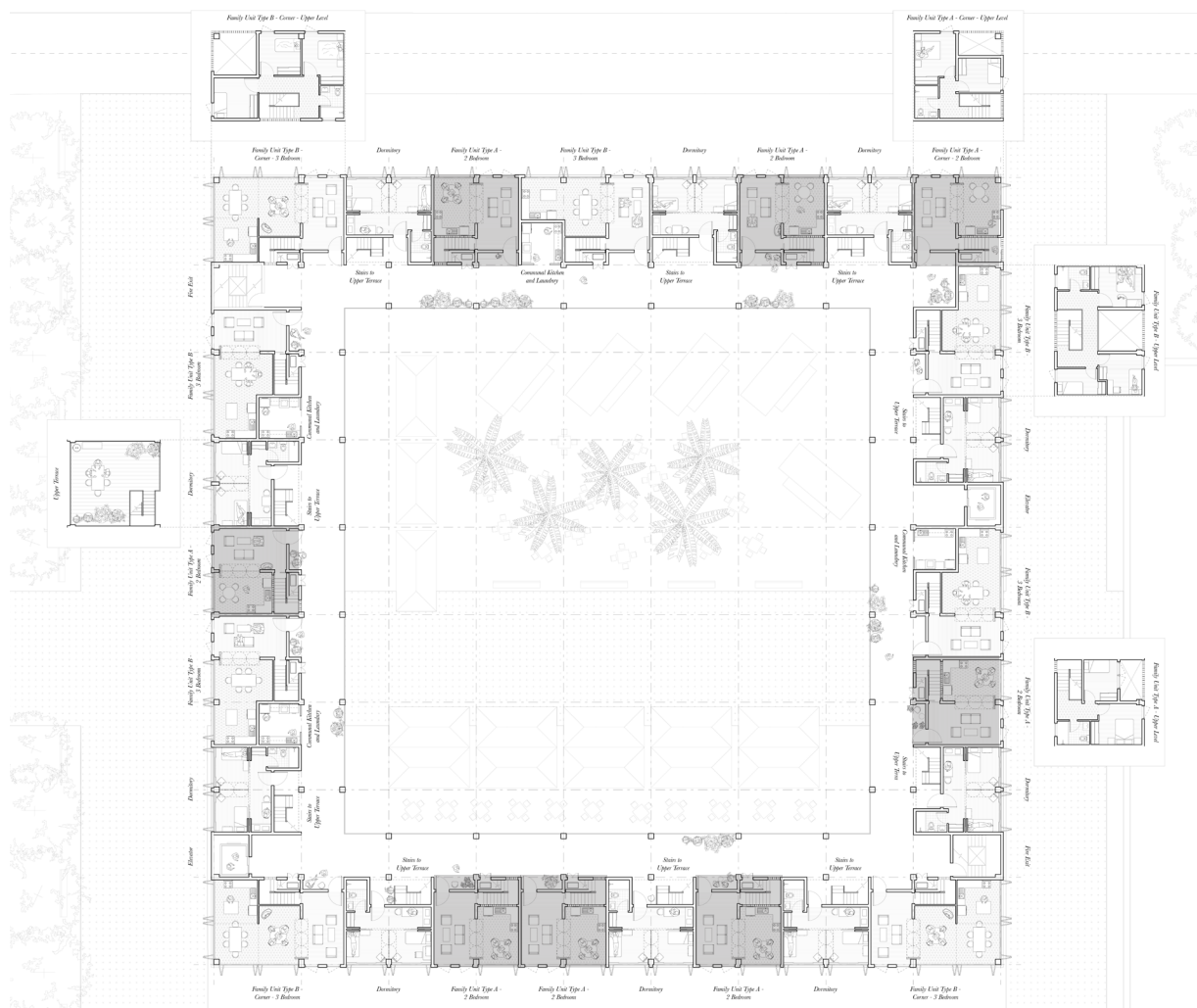


Figure 2.34: Typical floor plan





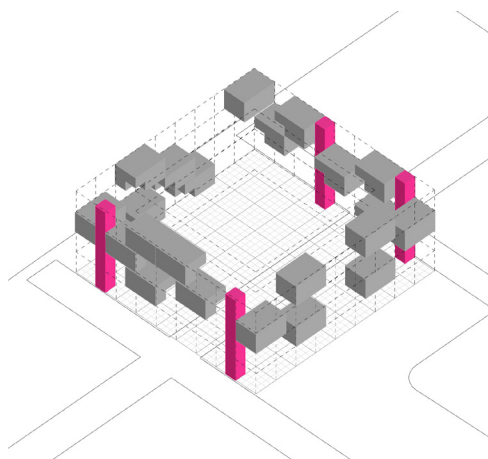
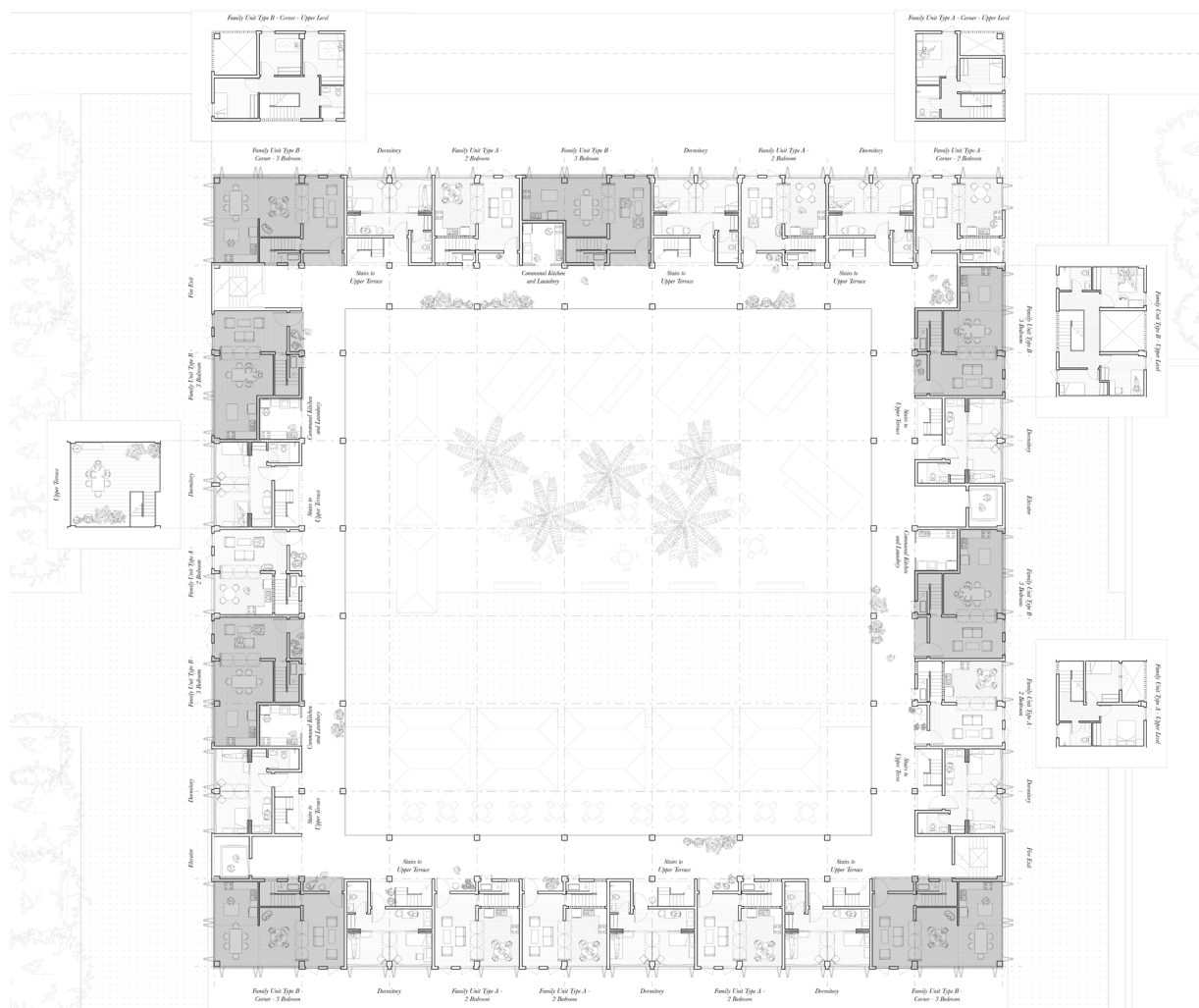


Figure 2.36: Location of Type B Family units throughout the building

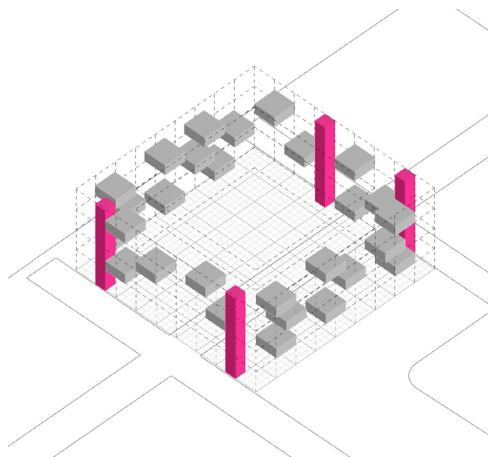
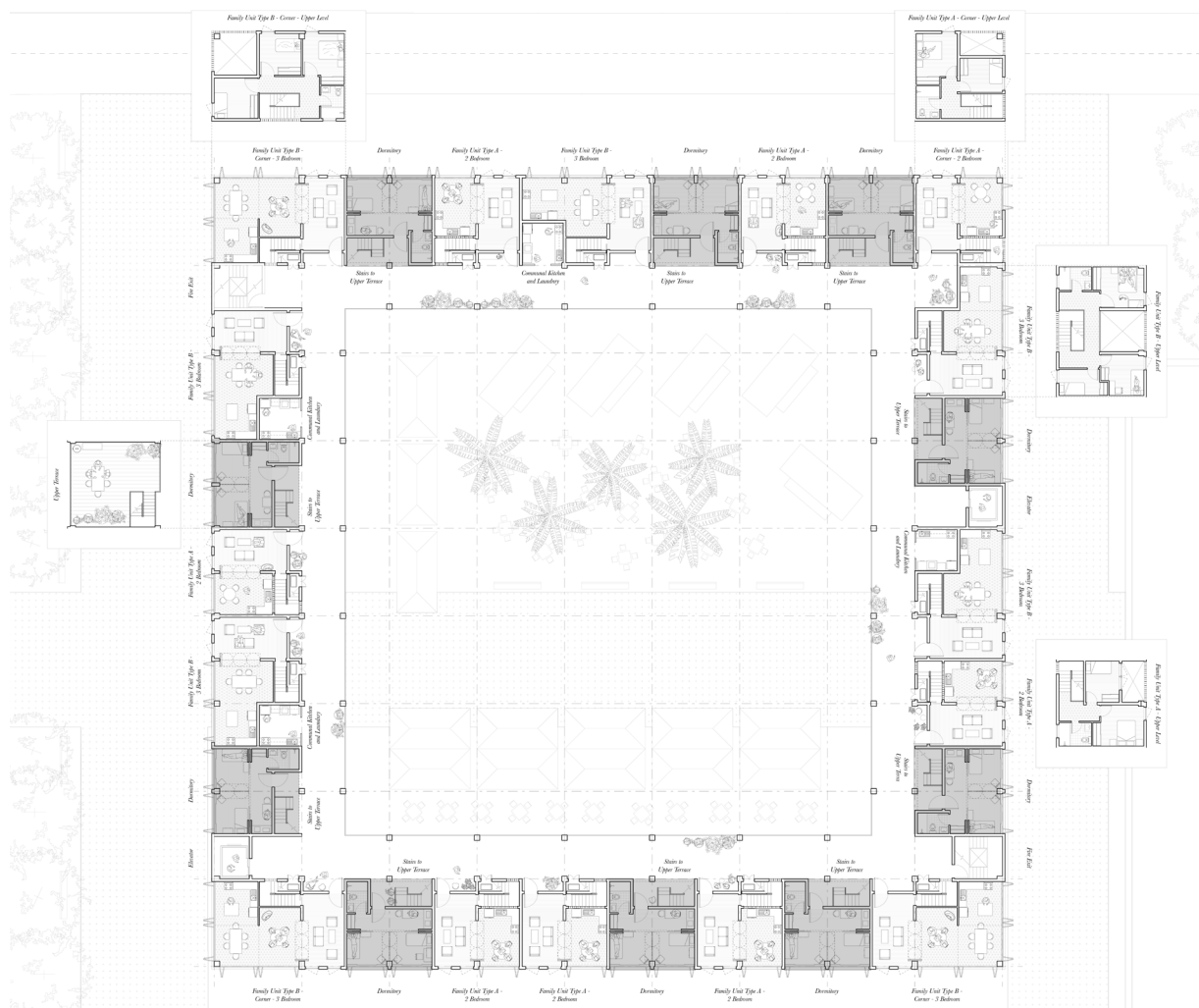


Figure 2.37: Location of Dormitories throughout the building

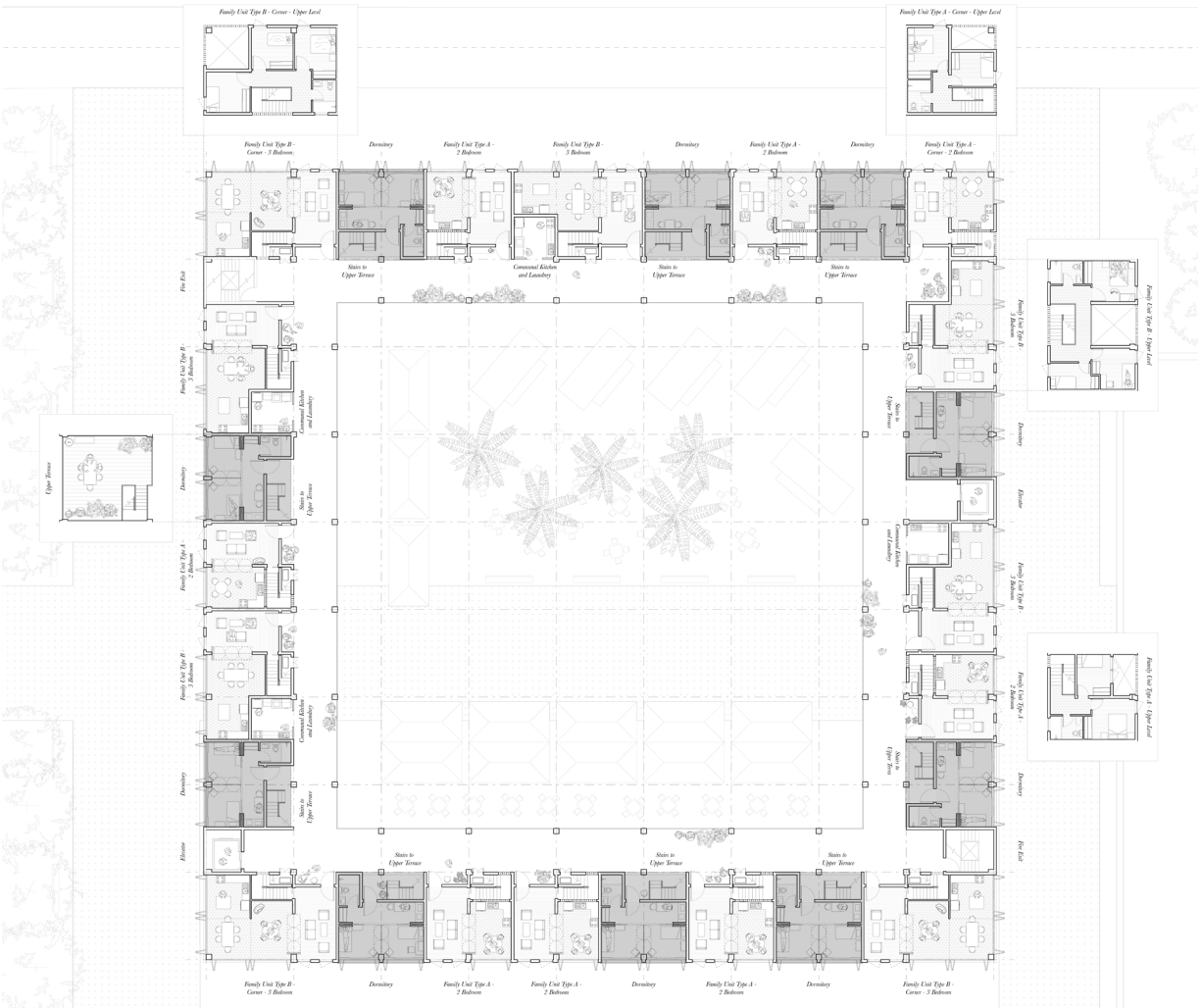
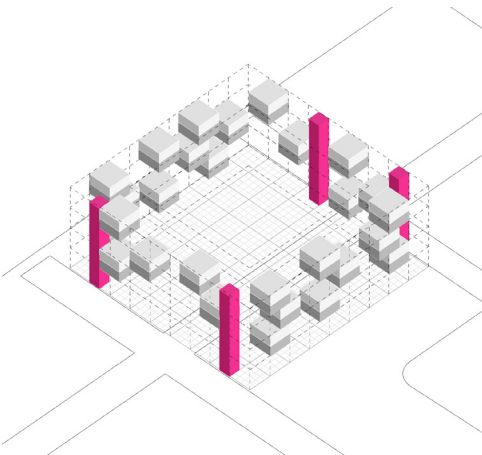


Figure 2.38: Location of exterior courtyards throughout the building



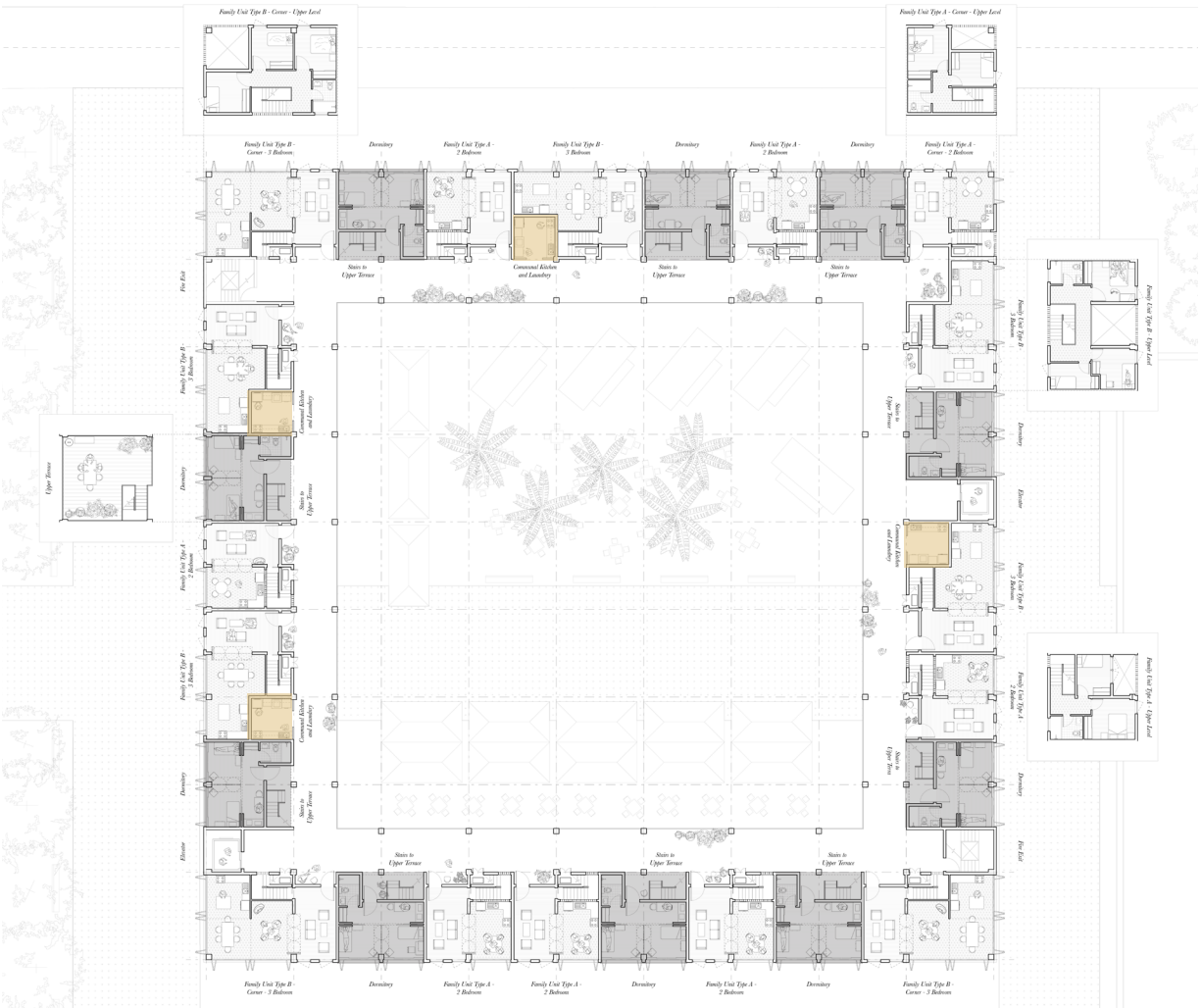
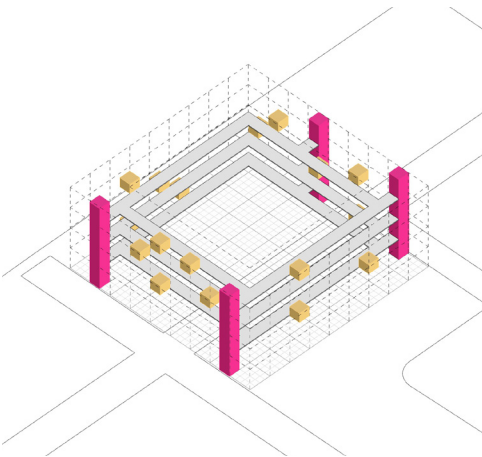


Figure 2.39: Location of communal kitchen and laundry rooms throughout the building



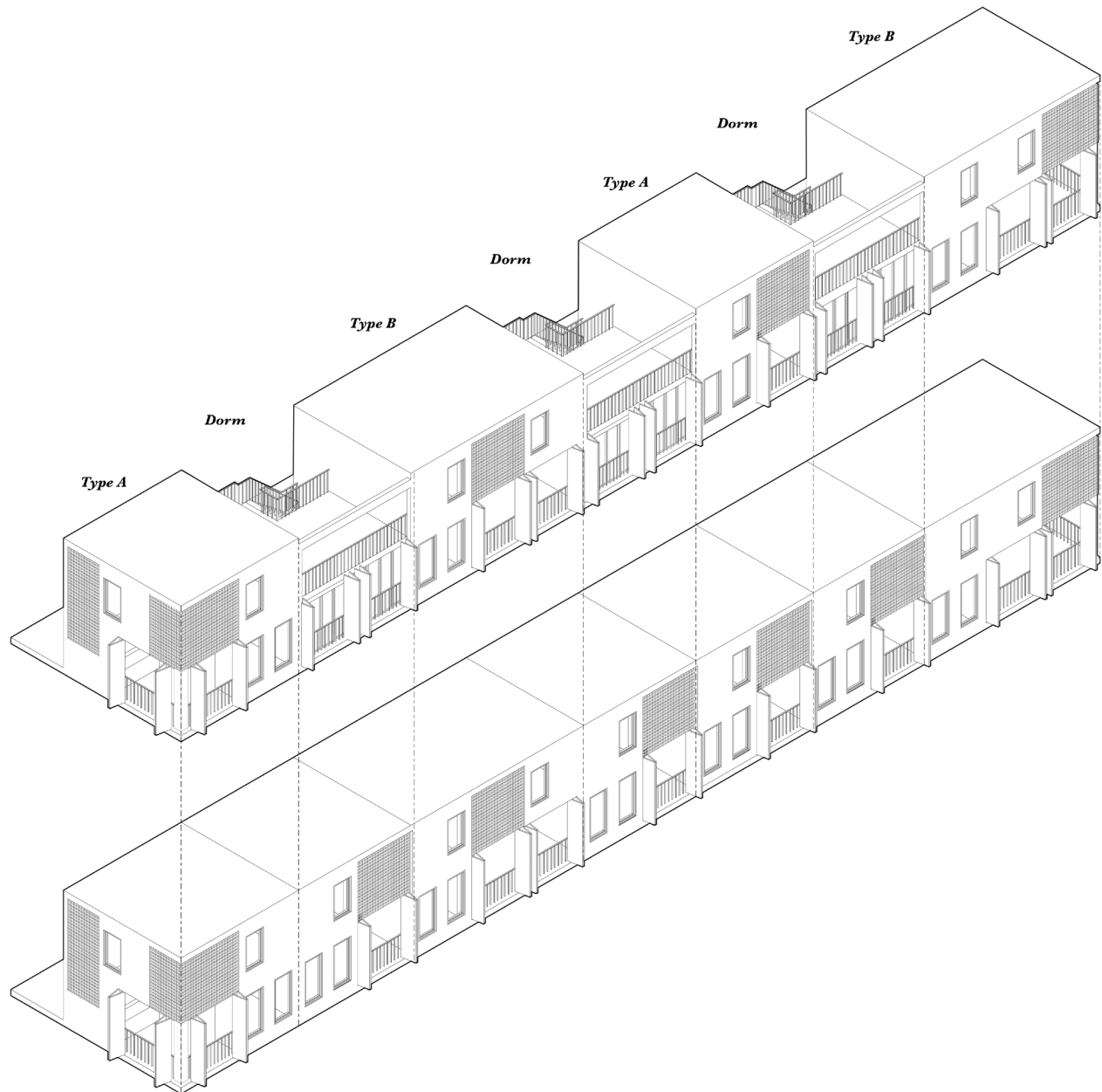


Figure 2.40: Diagram showing how dormitories could be turned into family units in the future. It is possible for the elevation to change if the occupants wanted to do so

2.3 - Conclusion

This thesis takes lessons from the street life and the built form of the *extramuros* neighbourhoods of Manila. These lessons inform the design process in both phases of the project. At street level, *extramuros* neighbourhoods allow residents to spontaneously interact with each other through informal basketball courts, karinderias, street side dining, sari-sari stores, and other micro enterprises. The built form of the *extramuros* changes constantly, since property owners are able to construct smaller scale buildings which respond to housing needs – such as the low-rise buildings, smaller additions to homes, or converting homes into dormitories for BPO workers. In comparison, the *intramuros* neighbourhoods of Manila do not support these kinds of modifications to the urban fabric since these practices are not common amongst large-scale real estate developments. Additionally, street life within the *intramuros* does not necessarily cater to the needs of BPO workers, since real estate developers prefer to open malls and other high-end retail outlets within their urban mega projects.

In order to bring aspects of the *extramuros* into the site, a series of urban design strategies are considered. Establishing connections to the neighbourhood of Cubao, through the extension of the street grid, and programming the street level with community spaces, and open public spaces allows for a seamless connection to the neighbourhood. Porosity throughout the ground floor, ensures that communal activities and people can flow freely and expand throughout the site. Mediating the needs of both real estate and government stake holders, the masterplan accommodates both commercial office and residential development, creating both new sites for BPO work to take place and housing for this

demographic. The final phase of the thesis involved designing one residential building, which houses both young BPO workers in dormitories, and families in larger apartments. Dormitories can appropriate additional space, eventually turning it into a larger unit for the occupants to settle in without leaving the building. The building promotes relationships between neighbours by providing spaces such as wide exterior corridors and exterior courtyards dispersed throughout the building, for interaction. These spatial strategies and social interactions aim to create a community where residents can settle in the city, close to where they work.

In order to address the affordable housing shortage in Metro Manila, government and real estate developers would need re-examine existing laws and development practices in order to address this urgent need. Existing practices include the designation of special enclaves (the *intramuros*) which legitimizes the colonial or economic regime that builds them, and the designation of special economic zones which are spaces that adhere to special and privileged economic conditions. The adoption of western urban planning principles and implanting them in sites such as Intramuros to Bonifacio Global City, further disadvantages BPO workers, since these spaces cater to wealthy individuals and foreign investors.

The primary challenge of changing these practices lies in the high cost of acquiring land within Metro Manila. Addressing this could involve creating new tax incentives, land leasing models, or new laws and acts, similar to those outlined in the *Special Economic Zone Act of 1995*, which can serve as a basic framework in the development of affordable housing intended for BPO workers. Government agencies such as the Bases Conversion

Development Authority, the Department of Human Settlements and Urban Development, municipal governments, and the central government, should set conditions in which real estate developers are given incentives to construct affordable housing.

Despite these challenges, Manilaños should also reconsider how these raw lands are viewed and how they can be converted not only for higher economic uses, but for greater social purposes. Creating sites for affordable housing within government-owned lands is one step in ensuring that the economic benefits of real estate development and the BPO industry can be shared with its workers.

Bibliography

- Agustin, Victor C. 2006. "GMA, here are Your Billions." *Philippine Daily Inquirer*, June 7, 2006.
- Bautista, Clark. 2011. "IT-BPO Industry's Direct & Indirect Economic Impact: The Outsourcing Multiplier Applied to the Philippines and Indian Economies." *Tholons Whitepaper*.
- BCDA. "About Us - Company Profile." Bases Conversion and Development Authority, accessed February, 19, 2020, <https://bcda.gov.ph/about-us>.
- Bloomenthal, Andrew. "Business Process Outsourcing (BPO)." Investopedia, last modified May 23, accessed February 25, 2020, <https://www.investopedia.com/terms/b/business-process-outsourcing.asp>.
- Bordadora, Norman. 2011. "Camps Crame, Aguinaldo for Sale — Purisima." *Philippine Daily Inquirer*, January 8.
- Department of Labour and Employment - National Wages and Productivity Commision. "Current Real Minimum Wage Rates." Department of Labour and Employment, last modified January, accessed February 27, 2020, <https://nwpc.dole.gov.ph/stats/current-real-minimum-wage-rates/>.
- Duque, Estela. 2009. "Miilitarization of the City." *Fabrications* 19 (1): 48.
- Farkas, Chen and Gaash, Netta. "Gifu Kitagata Apartment Building - Sejima Wing, Japan." <http://gifuprefecture.blogspot.com/>., last modified November 25, accessed April 14, 2020, <http://gifuprefecture.blogspot.com/>.

- Greenspan, Sam. "Half a House." <https://99percentinvisible.org/>, last modified November 10, accessed April 14, 2020, <https://99percentinvisible.org/episode/half-a-house/>.
- Guevara, Julius. 2016. *Determining the Housing Demands of BPO Workers*. Manila, Philippines: Colliers International Philippines.
- Hoffman, Andy. 2012. "Call Centres are Philippines' New Long-Distance Love Affair." *The Globe and Mail*. <https://www.theglobeandmail.com/report-on-business/call-centres-are-philippines-new-long-distance-love-affair/article4098533/>.
- REPUBLIC ACT NO. 7916 - the Special Economic Zone Act of 1995, (1995): http://congress.gov.ph/legisdocs/ra_09/Ra07916.pdf.
- Housing & Development Board. "About Us.", last modified December 3, accessed March 9, 2020, <https://www.hdb.gov.sg/cs/infoweb/about-us>.
- IT & Business Processing Association Philippines. 2016. "Accelerate PH Future Ready Roadmap 2022: The Philippine IT-BPM Sector - Executive Summary." .
- Jalbuena, Bernadette and Gissel B. Blanco. "Bonifacio Global City Master Plan." City of Development Planning Office, Taguig, Metro Manila, Philippines.
- Kleibert, Jana Maria. 2014. "Islands of Globalisation: Offshore Services and the Changing Spatial Divisions of Labour". *Environment and Planning A: Economy and Space* 47 (4): 884.
- Klinenberg, Eric. 2018. *Palaces for the People: How Social Infrastructure can Help Fight Inequality, Polarization, and the Decline of Civic Life*. New York: Crown.

- Lico, Gerard. 2008. *Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines*. Quezon City: The University of the Philippines Press.
- Magtibay-Ramos, Nedelyn, Gemma Estrada, and Jesus Felipe. "ERD Working Paper no. 93 - an Analysis of the Philippine Business Process Outsourcing Industry." Asian Development Bank, Manila, Philippines.
- Mundo, Prosoco. 2014. "Land Conversion: Transforming Urban Military Baselands to Higher Economic Uses." *Journal in Urban and Regional Planning* 1 (1): 16.
- Pag-IBIG Fund. "History of Pag-IBIG Fund.", accessed March 5, 2020, <https://www.pagibigfund.gov.ph/history.html>.
- PEZA. "Operating Economic Zones." Philippine Economic Zone Authority, accessed February 25, 2020, <http://www.peza.gov.ph/index.php/economic-zones/list-of-economic-zones/operating-economic-zones>.
- Reed, Robert. 1978. *Colonial Manila: The Context of Hispanic Urbanism and Process of Morphogenesis*. Berkley and Los Angeles California: University of California Press.
- Sassen, Saskia. 1998. *Globalization and its Discontents*. New York: The New Press.
- Shatkin, Gavin. 2008. "The City and the Bottom Line: Urban Megaprojects and the Privatization of Planning in South East Asia." *Environment and Planning* 40 (2): 338.
- Shatkin, Gavin. 2005. "Colonial Capital, Modernist Capital, Global Capital: The Changing Political Symbolism of Urban Space in Metro Manila, the Philippines." *Pacific Affairs* 78 (4): 577.

- Sudjic, Dezan. 2017. *The Language of Cities*. United Kingdom: Penguin Books.
- Sumsky, Victor. 1992. "The City as Political Actor: Manila February 1986." *Alternatives: Global, Local, Political* 17 (4): 479.
- Van Den Mujizenberg, Otto and Ton Van Naerssen. 2005. "Metro Manila: Designers Or Directors of Urban Development?" Chap. 8, In *Directors of Urban Change in Asia*, edited by Peter J.M. Nas. Vol. 9, 126. Milton Park: Routledge.